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ABSTRACT

The report of the seminar on inservice vocational education personnel development contains the transcripts of 14 speeches and the reports of six discussion groups. The papers are organized under four main headings: the context of inservice education, which contains three papers on inservice education philosophy, requirements, and responsibility; industry, business, and education cooperation, which contains three papers on inservice personnel development programs and patterns in Texas, Oklahoma, and New York State; competency/performance based personnel development, which contains five papers on performance based teacher education programs for the general needs of vocational teachers and for the specific needs of agriculture teachers, and certification standards and needs; and models, strategies, and change, which contains three papers on an evaluation model, strategies of personnel development of vocational education in Canada, and change in the schools. The six discussion group topics are: principles and strategies of inservice personnel development; needs identification and program evaluation; supervising teachers; recertification and competency based standards; trends, issues, and problems in inservice teacher education; and career development for professional personnel. The seminar program and seminar staff are included. (JR)

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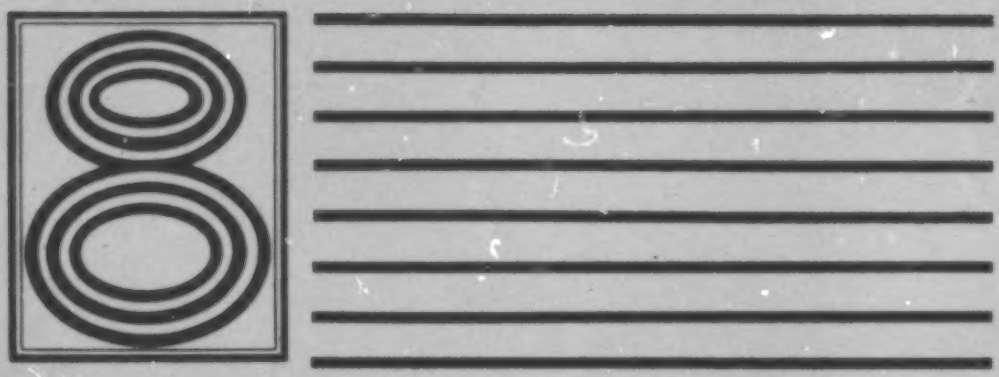
IN-SERVICE VOCATIONAL EDUCATION PERSONNEL DEVELOPMENT FOR THE 1980'S



EIGHTH NATIONAL VOCATIONAL EDUCATION PERSONNEL DEVELOPMENT SEMINAR

THE CENTER FOR VOCATIONAL EDUCATION
The Ohio State University • 1960 Kenny Road • Columbus, Ohio 43210

LEADERSHIP TRAINING SERIES NO. 43

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THE CENTER MISSION STATEMENT

The Center for Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning and preparation. The Center fulfills its mission by:

- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs

Leadership Training Series No. 43

Eighth Annual National Vocational Education Personnel Development Seminar

IN-SERVICE VOCATIONAL EDUCATION
PERSONNEL DEVELOPMENT FOR THE 1980'S

October 28-31, 1974
Madison, Wisconsin

Edited by

Kenney E. Gray
William J. Petrie

The Center for Vocational Education
The Ohio State University
1960 Kenny Road
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January 1975

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Foreword

Two hundred forty-five educational leaders from thirty-nine states, two territories, and nine provinces of Canada participated in the Eighth Annual National Vocational Education Personnel Development Seminar that was held in Madison, Wisconsin, October 28-31, 1974. The theme for the Seminar was "In-Service Vocational Education Personnel Development Programs for the 1980's."

The objectives for the seminar which guided the development and execution of the program included: (1) identify trends and changes needed for the in-service education of persons engaged in programs of vocational education at all levels; (2) provide an opportunity for the development of self-improvement of individuals who are responsible for upgrading professional personnel in vocational education; and (3) increase the knowledge and awareness of participants in the in-service personnel development in the areas of principles and strategies, needs identification, program evaluation, selection and renewal of supervising teachers, recertification standards, and career development of professional personnel.

The seminar consisted of two keynote addresses with a series of presentations and group discussions on related topics. This publication contains the formal presentation papers and reports of group discussions.

The Center for Vocational Education is pleased to have conducted this 8th annual in-service professional development seminar for the leaders of vocational and career education personnel development programs nationally. Additional professional development seminars are provided annually for state directors of vocational education and their staffs and for the research training needs of vocational educators at local, state, and federal levels.

We wish to thank the seminar participants for their active and meaningful participation. Special appreciation is extended to the program planning committee for their assistance in guiding the development of the program and to the presiders of each session as well as the leaders and recorders of each discussion group. The following Center staff are recognized for their contributions to the seminar: Kenney E. Gray, seminar chairman; William J. Petrie, research associate; Carlene Tondryk, evaluator; Nancy Lares, secretary; Dallas G. Ator, associate director; and Daniel E. Koble, project director.

Robert E. Taylor
Director
The Center for Vocational Education

Preface

In-service Vocational Education Personnel Development Programs for the 1980's was the general theme of the 8th Annual National Vocational Education Personnel Development Seminar. The seminar focused on both pedagogical and technical aspects of in-service education.

The two keynote speakers addressed philosophical bases, issues for in-service education and changes occurring in schools. Three presentations focused on in-service education for the 1980's, responsibility and accountability, and industry, business, and education cooperation. Six presentations were given on competency/performance-based personnel development and one on evaluation of personnel development programs. One presentation was given on strategies of personnel development in Canada. All these presentation papers are included in the *Proceedings*. Further, brief summary reports from group discussions focused on these and other topical areas are included in the *Proceedings*.

Two additional features of the seminar were optional evening programs and a tour of nearby Madison Area Technical College programs and facilities. The optional programs consisted of three simultaneously conducted programs one evening and three additional programs conducted another evening. Each program presented research in progress or recent developments in personnel development strategies and practices.

Kenney E. Gray, Seminar Chairman

William J. Petrie, Research Associate

Acknowledgements

I wish to acknowledge those individuals who accepted roles of responsibility to insure the success of the Seminar. The following names are listed along with the functions they performed.

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Chapter I

The Context of In-service Education

PHILOSOPHICAL BASES, TRENDS, AND ISSUES FOR IN-SERVICE EDUCATION

by Fred T. Wilhelms*

There are three reasons why any organization that intends to mean something must have a way of bringing all its people along.

1. The organization depends on competence in the way its many jobs are done; therefore, it must provide every staff member ways to build up the skills he needs.

2. The organization depends on people; therefore, it must offer every staff member a stimulating climate in which to grow—to grow, first of all, simply as a person, but also to grow as an autonomous professional.

3. The organization itself is a sort of organism; therefore, like any organism, it has to have a nervous system. It needs this, first, in order to coordinate all its parts—else it simply cannot be a system. But it needs it even more because it cannot do without the ability to learn, as an organism learns, to adapt itself to change and new challenge. Without a system of intelligence which runs through all its parts, any organization is doomed to slog on forever, just following old habit and blind instinct, unable to reason and to act.

All of us in this room know that our school organizations are dangerously close to that inability to learn and then to adapt on the basis of learning. In his devastating critique of education, Silberman blamed a quality he called "mindlessness." I think he meant institutional—not personal—mindlessness. I myself often suggest to school audiences a rebuilding of the curriculum based on a systematic re-analysis of our purposes with a view to the special needs of our times. Sometimes, when I am lucky, the applause is generous; I may even be told that my message has been "inspirational;" but always, in one way or another, I am let to know that, of course, the thing can't really be done. That is to say, schoolmen tell me that their school systems are not really capable of applying a collective intelligence to making a comprehensive study and then concertedly applying its findings to action.

And what about your experience? You probably wouldn't be here if you hadn't spent years in supervision, sweating out long efforts to achieve improvement. Am I wrong in guessing that in the small hours of the night you are often disheartened at the size of the results?

---

*Fred T. Wilhelms, educational consultant, Lincoln, Nebraska.

Why are we so crippled in our ability to move? Why do we resemble our retarded students more than our brighter ones when it comes to our ability to learn from new ideas and research and adapt our institutions accordingly? Why are schools, as institutions, so lumberingly slow to change when change is clearly needed?

Is it, perhaps, because we have concentrated our "supervision" too completely on the skills-building function—on "methods"—while neglecting the two higher functions? I am afraid so. There is an all-pervading faith, both among the lay public and within the profession, in what often get called "the new methods." Some school boards aid teachers in going to summer school; ask one of those board members what he expects the teacher to learn there and I'll bet you that the answer will come back: "the new methods." Ask a teacher himself what was good or bad about a lecture, a workshop, or a course, and his critique will almost always be calibrated on a scale of how many what-to-do and how-to-do-it specifics he was given. When you yourselves make a supervisory visit and then hold a conference with the teacher, won't it almost always be the detailed specifics that count for most?

Well, of course, a fair amount of that is necessary. Skills-building <u>is</u> an essential function. But stop and think: Isn't it an odd situation when highly trained professionals almost demand that someone else tell them how to do their daily work? When the ultimate criterion of a superior officer or an outside "authority" is how closely he can prescribe detail? When little tricks of the trade are the big thing, while fundamental ideas, research findings, and basic principles get dismissed as "mere theory"? Is that what we mean by a profession? Is it any wonder that we get stuck at the tinkering level and can't get to the sweeping adaptations that depend on mobilized intelligence and educational statesmanship?

We need a new strategy. We've been fighting too long for the low ground. Now it's time to follow the military slogan: "Take the high ground and hold it." Let me remind you that there are two peaks dominating that high ground: (1) potentiating all our staff people, including ourselves, at a higher level, as autonomous persons and as professionals; (2) weaving a school-wide and system-wide nervous system so that we can act in coordination, learn as an institution, and adapt with prompt intelligence. And let's be realistic enough to remember that while we are tackling these higher functions we still have to get the skill-building done, too.

A big order! Where do we start? I suggest that we start at the real center, with <u>people</u>, and reach both ways.

What do we want in a teacher, anyway? Competence, of course, but I mean beyond ordinary competence. I can't know what each of you want, so let me be honest enough to talk about what <u>I'd</u> want—if I were in your shoes—and you can agree or disagree or invent adaptations as I go along.

For one thing, I want people around me who are strong: tough-fibered men and women who above all else are their own; real persons who have the inner confidence to trust their own hunches and the nerve to follow their best professional judgment. I want colleagues who have the nerve to take a chance now and then, not recklessly, but because they believe in it and are willing to take the consequences. I want people who can get their nose bumped in a failure, learn from it, grin, and go right on boring in.

For another thing, I want people who are sensitive and compassionate: men and women who can be gentle, as only the truly strong are able to be; open, generous, accepting people who can look

down into themselves with clear eyes, understand their own inner motives and still live comfortably with themselves—and as a result, can understand others better and empathize with them, too. I want colleagues who have a great deal of warmth and affection inside themselves and let it go out spontaneously to those around them.

One could go on and on with descriptions, but this couple of major dimensions will do. Anyway, the practical fact is that heaven and the teacher-training institutions don't exactly flood us with ready-made faculties who have everything we hope for. If, as a leader, I want a crew who have those characteristics, I'll have to help them grow that way.

Impossible? Not at all, if you and I are up to our jobs. Normal, healthy adults may have a lot of free-floating anxiety, but they also have a tremendous amount of energy to grow in the directions I've suggested, if the climate is right. And the rules for creating that climate are fairly simple. Let's look briefly at the basic logic of the situation and then settle down to the practical specifics of what we can do.

If I want people in my crew who will dare a little, now and then, try new ideas, take some chances, I have to make it all right for them to fail. That's what taking chances is all about: more possibilities of failure. And human beings won't take the risks if the cost is too high. And what makes the cost too high? Not so much that their new plan may not work perfectly; that's something mature, realistic people can stand. What they cannot stand is losing the positive regard of those important to them. So if I get uptight every time some little thing goes wrong, if I get scared and run for cover when there's criticism, I may as well fold my tent and move out. Teachers have been telling me for years how they're nudged into trying something and then left holding the bag if there's an adverse reaction. They're old hands at this; they almost expect it to happen. There's no use of my talking myself blue in the face with advance assurances. I've got it to prove in action. But if I do prove it when the going gets tough, then we can go places together.

Basically, it's the same on the side of warmth and sensitivity and affection. If they're going to be free-swinging and spontaneous—be themselves openly and transparently—they have to be living in a warm climate. Up in the mountains of Mexico, where the nights are cold, there's a lizard that every evening buries himself in the sand; all but the top of his head, where there's a large artery just under a very thin scalp bone. The cold immobilizes him; but in the morning the sun warms the blood in his head and he can burst out into the open and go about his work. It's a crazy example, but we're all a little like that. We need to be warmed up in order to be warm-acting.

Human beings—all human beings, young and old—have a few fundamental needs. They need to feel accepted, respected, liked, in a warm, sunny climate of friendly affection. It's just the way people are; otherwise they freeze up, like that chilly lizard. They lose the flexible free-flowingness that comes with warmth; they act stiff.

Then they need the experience of success. Lots of it. Not necessarily such huge success; a lot of little success experiences will do the trick. Some taste of success on their tongues every day. And they need to know it is success. (They don't automatically; many good, conscientious teachers bleed internally for years, thinking they are failing when really they are doing very well.) The successes need to be dramatized a little, held up for them to see and enjoy.

I don't mean faked success, or even just easy success, doing what they've long been able to do. Human beings need challenge, too. The success that counts is the one they can just barely win by stretching.

And then there's freedom. God! How human beings need freedom! And what a shot in the arm it is when they feel their freedom growing. Responsible freedom, it has to be; really, responsibility is the bigger half. That's what mature professionals—and little children, too—crave. Not to be forever a little cog in a big machine, driven, driven, driven. But to be somebody who counts, somebody who can make choices, and take the responsiblity for them, even when that's rough.

Those are the sorts of things that help people to grow and blossom and bear fruit. They're the sorts of things we've got to capture for those who are in our charge. And, for once, let's be realist enough to know that these things are absolute essentials. A farmer doesn't say it would be "nice" if his corn had sun and rain. He faces the fact that if the sun and rain fail he will get less corn. Well, you can get less person, too—and less teacher. And as all too many schools go nowadays we're getting a damn sight less.

Let me be personal about this, to make it easier to make the points I want to make. For, at least forty years, I've been in leadership positions of some kind, large or small. There are a lot of spots on that record that I wish I could erase, incidents that it's painful to remember. In the earlier days we didn't have the insights or the resources behind us that you have open to you now. But, even so, I was a slow learner.

If I had it to do over, the first thing I'd jettison is the notion that the main thing in supervision is to visit each teacher, watch his work, and then hold a conference to critique his performance and tell him how to do better. I don't mean I wouldn't visit. I'd try hard to see each one enough to: (1) see what he's like, what his personal style is; (2) see what his situation is, be aware of what he has to work with and what he's up against; (3) enjoy with him an occasional little triumph, some red-letter day in his work—and gloat over it with him. Along the way, maybe I could give him a tip now and then, but that wouldn't be my major purpose.

Why do I say this? Because I perceive that, between mature professionals, it's always a nervous, touchy thing when one is giving even the slightest hint of being superior, inspecting, and telling the other how to do his job. It's a chilling thing—no matter how tactful and well-intentioned I may be or how earnestly the teacher may try to use my help. Exceptions, maybe, in the case of beginners, who often crave a few tips or practical details. But with mature professionals there are better ways, as we shall soon see, ways that deliver far more help and don't jeopardize the partnership relation that I want to build.

Basically, what I'd want to do is to help the teachers take the skills-improvement program pretty much into their own independent hands. And, for that, there are recent inventions that are tremendous.

First off, I'd try to gather a few hardy risk-takers around me, on a volunteer basis, and we'd study Interaction Analysis. There are a couple of dozen forms of it, but I'd start with Flanders' system, because most of the others are more or less based on it, and once you master it you can move easily to others if you want to. It would take, say, twenty-five hours to learn the basics, and then we could start having professional fun using it.

Why start there? Because Interaction Analysis was the first device that enabled a teacher to look objectively at his own teaching acts. All teachers who are worth their salt keep trying to improve their teaching. But they've been like a golfer trying to correct a slice without knowing what his swing is like in the first place—or what's causing the slice.

Interaction Analysis can help each teacher be his own "pro." And the beauty of it is that it doesn't call for some "superior" to inspect him and tell him what to do. As more and more teachers in your system get handy with the thing, friendly colleagues can make the necessary tabulations for each other. Then the teacher can take his record home, study what it shows, plot some changes, and study the results again. There is solid evidence that it works. Before the first plunge the water will look awfully cold, even to a teacher with lots of nerve. But reports from one group after another show that very soon the teachers who get into it begin to relax; they chat freely with each other about their teaching patterns. And if the climate is warm and supportive, other teachers get up the nerve to get into the swim. I'd hope that after while they'd want me in there with them, too. Flanders believes that the system is at its best when the supervisory staff are involved. But I wouldn't rush that, and if it never happens, so be it.[1]

Once we have Interaction Analysis skills under our belt (or even without them, though I suspect that may be a bit less effective), there are other lines we can pursue. Micro-teaching has proved tremendously effective—and fast—in skills development. A teacher singles out one skill he wants to improve, say, the asking of higher-level questions. He plans a very, very small lesson, picks a half-dozen or so of his kids, and teaches the lesson in from six or seven to fifteen or twenty minutes.

He can do this with somebody keeping a sort of score sheet on him. But it's most effective if there's a small lab with video-tape equipment that he can turn on and off himself. Then he can take the tape home, study it by himself, replan his approach and teach the lesson again and study that tape. No one else needs to see the tape, but the stories tell that he'll soon be sharing his tapes with his wife, a trusted colleague—or even his principal. If he knows Interaction Analysis he can apply that to the tape, too.

I'd fight like mad to get my teachers a micro-teaching lab. It needn't be big, and the equipment isn't very expensive; maybe you already have it. Once I had it, I'd get back-up stuff like the mini-courses from the Far West Lab in Berkeley.[2]

Each of these mini-courses concentrates on one sort of skill. There are excellent films that discuss the skill and model it abundantly. Then there are thorough guides to help the teacher analyze his tapes. The proven record of success of those materials is outstanding.

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[1]About this and other elements which follow I have written in much more detail in *Supervision in a New Key*, available from the Association for Supervision and Curriculum Development, 1701 K St., N.W., Suite 1100, Washington, D.C. 20006. There I have listed sources, specific titles, costs, etc.

[2]Once again, I haven't time here for details. You can find a good many of them in *Supervision in a New Key*, and new resources are showing up all the time.

If I couldn't swing the equipment and the lab, I'd turn toward other helps, like those from the Northwest Lab in Portland. These rely on small groups of teachers—three-somes and six-somes mostly—to rotate in a variety of roles and critique one another. They're cheap, specific, and enormously helpful. The Northwest Lab courses tend to be larger in scope. They start with basic skills, practice them thoroughly, and then put them together into larger patterns. En route they generate a high by-product of sensitivity training.

Well, I could go on with such devices, but that's enough. What I'm shooting for is two birds at one time: (1) a way of developing basic, high-type skills far more quickly and effectively than we ever have by traditional classroom visiting and critiquing; (2) a way of getting things into the teachers' own hands, so that they can decide what they need and carry on their own lifelong quest for excellence.

Of course, the ultimate resource to help them help themselves would be the teacher center, where they could have in one place under their own control to use, as they saw fit, all the resources they need. It was a tragedy that several years ago, when the U.S. Office of Education set out to launch 200 such centers, the project ran into heavy political head winds and never came off. Nevertheless, here and there, school districts are moving. In Europe, and especially in England, the record of success is high. If you don't know what I mean, read the delightful booklet by that great British pioneer, Sir Alec Clegg, *Revolution in the British Primary Schools*. You can get it from the National Association of Elementary School Principals. It is the ultimate revelation of what teachers can do when they are free and have the means to work with.

I think that in a hurried way I've shown that you can start with people and harmonize a first-rate skill-building program with that concern. But I don't want to work on skills all the time. I want the people I work with to feel bigger, more important than they usually do. And I guess my first contribution to that is to show them that I see them big.

I need to send them a lot of signals. For instance—this may sound like a daffy place to start, but I could do it well because I feel it so deeply—I'd demonstrate tremendous concern for all the conditions under which they live and work at school. If we didn't have one already, I'd do my best to secure a comfortable teachers' lounge—one with some grace and beauty, along with fresh coffee and a plate of cookies. I'd be deeply concerned about the place they had to eat lunch; I've seen far too many hole-in-the-wall corners behind a screen where they get out as fast as they can, scraping their left-overs into a tin garbage can. I'd fight for a gracious place, with music, adult food, and a chance to talk. I'd do it because I want to say to them in every way I can, "You are important professional people and we cherish you."

I'd fight, too, for every teacher to have a private place to work, to confer with students and colleagues, to read, and maybe even to think. I am literally shocked by the message we send teachers when even in new, expensive buildings, a teacher's "office" consists of one bookshelf and a flat space to grade papers on. Why, in many schools, the secretaries have far nicer space and equipment than the department heads have!

I'd monitor my conversations with my staff members, too—even the quick, casual ones in the hall. A basic amount of friendly chit-chat is fine and necessary. But I'd do them the honor of assuming that, like me, they enjoy kicking professional ideas around, hunting for solutions to the

problems we share. I'd swap enthusiasms with them about good articles or books we've happened to find. I challenge you to do what I've done several times in my life: for a few days keep a record of the content of your quick conversations with your people. Take a look at the level of the questions raised and the resources brought to bear on them.

To repeat: in these and many other ways—including a generous flood of earned praise—I want to signal to teachers that they count.

But, of course, that will still all be futile if I go on making all the decisions and they're still just little cogs in a big bureaucracy. I've got to get them genuinely into the decision-making process on all that matters to them.

And that's easier said than done. An awful lot of the problem lies right inside ourselves. It's often said that we administrators are autocratic, that we have authoritarian personalities. I think that's only rarely the case. By and large, we educational leaders are decent people; we got where we are because people saw us as trustworthy. The trouble is, we're awkward. We lack the skills of effective group process. When we open a meeting we don't intend to dominate it; we want participation. But we often handle it so crudely that in the windup we almost might as well have been autocrats. And then our teachers turn off, their expectations go sour, and finally a lot of the problem is inside them, too.

If I had it to do over I'd study group process like a fanatic, because I'd know that it was my primary tool; not just how to make it pleasant, but how to make it an effective, economical approach to policy-making and action-planning. I'd learn when to use small groups and when to use large ones, and how to structure each depending on whether we were after spontaneous ideas or hard executive planning. I'd learn all the little tricks of the trade, like the occasional use of socio-drama to get a meeting off dead center. I'd learn to handle contributions and conflicts deftly, keeping myself out of the road.

But there's more to it than tricks. I'd labor to understand the dynamics of groups, at a deeper level. And even though I have done a lot of it, I'd put far more energy into understanding human nature and motivation. For people are the well-spring of it all—and people are funnier than anybody.

But finally—and this is the most crucial thing of all—I'd dig down inside myself and try for insight into that sticky, confusing, contradictory mass of hidden impulses, doubts and fears, latent prejudices, and golden resources down in there. I'd take every chance I could find to cultivate my own sensitivity, to be able to hear what the other guy can't quite say, and feel it with him. I'd even try to screw up my courage to go to Bethel, or some place like that, for a couple of weeks to strip myself bare.

For we, people like you or me, are the key to it all. We have enough status and power to close doors or open them. We are worth investing a great deal in. And perhaps our greatest problem is that we don't truly believe that. Like our teachers we see ourselves too small.

I have worked most of my life with people like you. I know what your life is like, how hard and idealistically you strive, how pressured you are, and how driven. Perhaps I have even added to to your burden by the stern demands I've laid upon you in this hour.

But, if I had the art, what I'd much rather do is help you to see what magnificently big people you are, how important you are. I'd like to help you see how much self-investment you are worth. I wish I could convince you to somehow take time out, right in the dust of endless battle, to cultivate your own soul. You are so important that, no matter what, you have to seize time to read, to reflect, and to enlarge yourself in any recreation that fits you, whether it's fishing, raising roses, or whatnot.

For "Ye are the salt of the earth: but if the salt hath lost his savour, wherewith shall it be salted?"

VOCATIONAL EDUCATION AND REQUIREMENTS OF IN-SERVICE EDUCATION FOR THE 1980'S

by Gordon I. Swanson*

Introduction

This paper will provide an overview of vocational education and its requisites for in-service education in the 1980's. First, it will examine the most probable environment or likely context for vocational education in the 1980's. Secondly, it will identify some present trends in the field and it will raise questions about whether these trends should be endorsed, reversed or ignored. Thirdly, it will discuss a number of "work force" related issues which will gauge the credibility of vocational education in the decade ahead. Finally, it will focus on some specific needs which could be central to the existence and functioning of professional development as well as the field of vocational education.

Why should vocational educators wish to look to the 1980's or 1990's or as far as the next century? Is it merely to try to get a clearer vision of the future? Perhaps so, but a more important reason is to improve present decisions! By projecting present trends into a foreseeable future it is possible to capture the double advantage of obtaining a clearer perception of the present, and it is possible to ascertain whether alternative decisions in the present might result in a more or less desirable future. And there are some other advantages: attempting to look at the future often leads to some planning, an exercise which always seem to remind us how awful our data is and also how important it is to be clear about goals and values. Those who undertake planning are the first to learn that many other groups are involved in the game and that the winners are rarely without a plan.

There is the preliminary question of how one should go about an attempt to examine the ten-fifteen year future of a field. Is there a basis for inferring the likelihood of events or activities a decade or more hence? Indeed, there are solid factual bases for making realistic ten-year estimates. Seen as selective scenarios and episodes, the future is already here. We need only to know how to capture the significance of the view. There are already some trends which will lead to inevitable and irreversible consequences, some which can be accelerated and others which can and should be reversed by collective intent and concerted action. It is not the purpose of this presentation to assess the future, but to consider possible futures in the light of present choice and alternative decision. Nor is it claimed that this paper will be so objective as to be clear of value judgment. Even the categories which one chooses to examine are reflections of value orientation. Such choices are among the ways which an author of this kind of paper intrudes on the indulgence of others.

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The Context of the 1980's

The context of the 1980's will include a number of dynamic forces which have already begun o operate and to attract attention. It would be foolhardy to try to catalog all of these forces. It is ufficient to reiterate that some of the 1980 context is already here or already clearly visible.

The most visible of these is the inevitability of worldwide famine in the 1980's. That it will ırrive no longer seems in doubt. It has already arrived in Asia's subcontinent and in Subsahara Africa. The body of factual data and responsible opinion about its growth to global proportions is impressive.[1] Still questionable are the possible consequences of famine on such a scale. Isolated instances of famne have occurred many times but it has never occurred before on a scale of worldwide disaster. It is ıot known, for example, how much permanent intellectual degeneration will occur among the undernourished surviving children. Nor is it possible to estimate the extent to which food will be used as a political or economic weapon. Even without addressing oneself to such speculative corollaries, it is awesome to contemplate that no one will escape either the cost or the other consequences of famine in the 1980's.

Similarly visible in the context of the 1980's is the possibility that America, and perhaps the entire world, will still be in the recovery stages of widespread recession. With little doubt that we are now surrounded by such phenomena, it is at least hopeful to contemplate that recovery is possible and, if so, it will extend into the 1980's.

More difficult to gauge are the circumstances which are likely to surround recovery. In the past, recovery from widespread multi-national recession has been accompanied by expressions and manifestations of nationalism, international conflict and mounting defensiveness. International cooperation and aid is often the aftermath of widespread war. But nationalistic pride and defensive interaction are traditionally the handmaidens of recovery from worldwide or regional recession. These problems associated with recovery will be with us in the 1980's.

A third element of the context of the next decade will be a move from ostensible to real population distribution policies. The need for it has been observed in the inhospitable nature of the expanding urban physical environment, the inadequacy of political institutions to serve the urban and rural poor and diminishing vitality of many rural towns. For several decades a number of public policies have operated to influence population distribution.[2] An implicit policy has been to award large defense contracts to firms in the western and southern states. Of more intra-state interest have been the population policies intended to share the tax benefits of industrial development among the jurisdictions providing public services to the employees of the industry.

Population distribution policies of the 1980's can be expected to take the form of federal finance for local public services as have been initiated already through Title II of the Comprehensive Employment and Training Act, the establishment of a variable scale of minimum wages to account for regional variations in price levels, and the continued refinement of welfare through nationalization along the lines of the negative income tax or some variation of the Family Assistance Plan. That more intensive population distribution policies will be operative in the 1980's is unquestionable. Whether they will include efforts to establish proportional mixes of ethnic or income groups is, and will be, matters of controversy and anxiety.

The context of the 1980's will certainly include continued redefinition of democracy at all levels of government and education. Since democracy is a journey rather than a destination, it can be safely predicted that the journey will continue and be marked by significant mileposts. New roles for women in the world of work, reexamination of the criteria for judging educational opportunity and new approaches to redressing disadvantage can be expected to emerge.

The four features of the context of the 1980's mentioned in this discussion—famine, the problems of economic recovery, population redistribution and the continued definition or elaboration of democracy are obviously incomplete and undoubtedly imperfect. The interesting conclusion which one can draw from them is that each taken singly, or all of them taken together, have important implications for vocational education. They signal the need for vocational education to be dynamic, flexible, ready, and responsive as time and events unfold.

The Impact of Present Trends

Even more clearly in view are a number of the present trends in vocational education, trends which may be accelerated, retarded or redirected as a response to understanding them clearly and devoting leadership and vision to any needed change.

The first and the most obvious trend is the decline in the average age of enrollees in vocational education. This is a recent phenomenon and a reversal of the opposite trend toward rising average age which had been occurring for several decades. In the 1960's the average age of vocational enrollees increased rather rapidly with the expansion of the post-secondary vocational enrollment. At the beginning of the 1970's it began its decline. Although total vocational enrollments continue to climb, the nature of the rise is interesting. Adult education enrollments continue to become a declining proportion of the total. Post-secondary enrollments are increasing at very modest rates. It is the secondary-level enrollment that is rising most rapidly and, most of all, the enrollment below the 9th grade level.

The reasons for the decline of average age are undoubtedly related to the categorical emphasis on industrial arts and homemaking, fields which have been traditionally comfortable in the junior high school. The decline may also be related to the relative ease with which career education has been accommodated at the lower grade levels.

There are many important questions. How much will the average age decline? Will it stabilize at some level or will average age begin to rise again? What are the consequences of a decline in average age?

Corollary trends involve a widening time-gap between vocational instruction and employment in an occupation and the apparently diminishing need for instruction in occupational competence as there is an increased separation of vocational education from the problems of the work force. This trend may continue, it may stabilize at some equilibrium point or it may be reversed. The direction of the trend is available to present planners and policy makers. Their decisions will determine the nature of vocational education in the 1980's.

A second trend involves a rapid growth of interest-group politics. This trend is seen in the rapid expansion of state-based public employee legislation providing, inter alia, teacher access to collective bargaining with binding arbitration or the right-to-strike. It is also seen in the growth and elaboration of occupational licensing and certification to cover an expanding spectrum of occupations, paraprofessions and professions. It is further seen as a manifestation of revenue sharing and decentralization of federal programs. The Comprehensive Employment and Training Act, for example, has resulted in a rapid growth of interest-group politics within and across jurisdictions involved in the program.

This trend is not one which can be greatly influenced by vocational educators, but it may have a significant effect on vocational education. It is likely to increase training requirements needed for various types of occupational licensing and it may tend to restrict the mobility of the labor force, particularly if licensing requirements differ among jurisdictions. It will undoubtedly generate the need for instruction in coping with political and bureaucratic environments. The growth of interest-group politics is a trend which necessitates accommodation and informed response, not apprehension or rejection. It will continue into the 1980's.

A third trend of significance to the field is the rapid expansion and proliferation of in-service teacher education. With expanding enrollments in vocational education, preservice teacher education enrollments are increasing very modestly while in-service enrollments are increasing very rapidly. It is known that in-service education is being provided by a growing number of institutions and agencies. It is also known that it consists of growing variety of different types of instruction. Little else is known about the trend.

It is not known, for example, whether the growth in in-service education is a response to new incentives, new requirements or new commitments. Nor is it known whether it is prompted by inadequacies in preservice programs and, if so, whether there is any feedback for improving preservice programs. Most importantly, it is not known whether the expansion of in-service teacher education is strengthening the capacity to provide vocational teacher education or whether it is dispersing and diminishing the capacity to provide it.

Projecting this trend into the 1980's leaves many unresolved questions and issues. If the trend continues, will it do so by resolving these unresolved questions or will it continue without resolving them? It is a trend of great significance to vocational education, primarily because it is not known whether it is enhancing or diminishing the credibility of the field.

Vocational Education and the Work Force - Issues Involving Credibility

The issues which involve the contributions and thus the credibility of an entire field such as vocational education are worthy of special study. There are some periods of time when such issues are of greater magnitude than others. The context of the 1980's described earlier in this paper and also the trends described above are adequate signals to warn that the credibility of vocational education may be severely tested as the 1980's are approached and entered.

The issues identified in the following paragraphs are limited and selective. Although they are presented as though they have been accepted already as credibility-related policy issues, this is not

true—they have been given very little attention by policy makers. None of the issues mentioned have been addressed, for example, by the National Advisory Council for Vocational Education. They are presented here with the explicit intent of urging specific policy and program attention as vocational education moves toward and into the 1980's.

Concern for the Entire Work Force

It is useful to begin with the earlier question of whether the average age of vocational enrollees can continue to decline or whether vocational education should begin to deal with the entire age range of the work force. More pointedly, the issue should be confronted by raising the question of whether the field of vocational education can comfortably accept the policy implications of a vocational education enrollment whose average age is declining while the average age of the work force is rising.

There is a substantial body of responsible educational opinion urging the implementation of "lifelong" education or, as it is sometimes called, "recurrent" education. Vocational educators often join this discussion and point out that workers are now changing jobs as many as five-seven times during a working career. Yet vocational education continues to be focused on the young whose average age is slightly beyond the junior high school years.

It is not solely an issue involving average age, it is also an issue involving the nature of instruction. Vocational education concentrates mainly on the problems associated with entry to the labor force, rarely on the problems encountered by workers after entry or on the problems associated with exiting the work force. The main concentration is on problems of pre-employment and initial placement.

As vocational education approaches and enters the 1980's, the credibility of the entire field will be in jeopardy unless its policies and programs begin to focus more broadly on the entire work force, from entry to exit. The present enrollment of de facto and de jure compulsory education is about 44 million persons. The present work force numbers about 88 million. The present focus of vocational education is mainly on the former and only peripherally on the latter. By the 1980's, the credibility of the field will be judged by its concern for and its instructional effectiveness with both.

More Focus on Productivity

The issue of work force productivity is likewise crucial as a credibility-related problem. It is not merely an issue whose importance is magnified during a recession. It is a long term training question of essential importance.

With comfortable detachment, vocational educators have observed that the economy has been moving from a "goods" oriented economy to a "service" oriented economy, from farm and factory employment to employment in the service sector. The arrival of a recession illustrates the bitter lesson that it is much more difficult to measure or to demonstrate productivity in the service-oriented sector of society than in the goods producing sector. There is the further lesson that vocational education has been so preoccupied with entry-level skill training that it has given almost no attention to the nature and focus of competence needed to deal with the problems and processes involved in

maintaining or increasing productivity. The luxury of tending to such a narrow range of worker-related problems is not likely to continue into the 19ℇ0's.

More Concern for Planning

The central concern for planning is a further issue for renewed attention as vocational education moves toward and into the 1980's. Concern for the planning of vocational education was highlighted in the Vocational Education Act of 1963. Again in 1968 the Vocational Amendments specified the need to focus on planning. New language began to emerge such as "needs assessment" and "special needs." The importance of planning arose again in 1972 when the Higher Education Amendments authorized the creation of another planning and advisory mechanism at state levels. In 1973 the Comprehensive Employment and Training Act authorized the creation of yet another planning body at state levels and numerous similar bodies at sub-state levels.

This legislated preoccupation with planning has had a very limited effect on planning vocational education or manpower programs. It has had a more important effect on the complexities of governance in both fields.

In vocational education as well as in manpower programs, the traditional focus of planning has been on the most comfortable basis of accountability, namely, enrollment. Yet data on enrollment continues to be opaque and almost meaningless. It provides little or no information on length of enrollment or on the nature and intensity of instruction. Nor is it accompanied by information on whether the enrollment occurred in a comprehensive school, a vocational school or as a special course offered by a school or an individual contractor. The nature of accreditation or the nature of any alternative approach to credibility is rarely known.

The recurrence of legislative attention to planning and the creation of overlapping planning bodies has been a curious phenomena of the past decade. Its consequence is more easily seen in bureaucratic structure than in actual program. Programs have undergone some linear expansion and special groupings as reflected vaguely in enrollment data. By legislation or by leadership within the field, planning is likely to continue as a growing concern as the field of vocational education approaches and enters the 1980's. Its growth is likely to be paralleled by more attention to evaluation and if present trends continue, to a type of evaluation which is increasingly political and decreasingly analytical.

Confronting Policy Issues

A fourth issue involves the extent to which vocational education leaders are willing to confront an array of policy questions which are central to training and employment policy but which have not been central, or even significant to the policy or program deliberations of vocational educators. Examples of these questions include the close relationship between training policy and tax policy. As an important determiner of training policy, the Internal Revenue Service controls powerful incentives and disincentives for vocational education and training by determining the conditions under which training is deductible from worker or employer income tax. Worker training provided by employers is invariably deductible from employer taxes regardless of the purpose of the training as long as it

satisfies employer purposes. When workers bear the costs of their own training, the costs of training are deductible from individual income taxes only when endorsed by employers as necessary for job retention. When costs of training, retraining or updating are borne by workers for the purpose of upward mobility and thus to higher remuneration within the occupational hierarchy and are not endorsed by employers, the costs of training is not deductible from individual income tax. This last situation restricts occupational advancement, it is a powerful disincentive to training, and it represents a policy of the Internal Revenue Service which is counter to the incentives which are essential adjuncts to public vocational education and training.[3]

Related examples include the various public policies associated with transfer payments linked with income maintenance and welfare. Income subsidies linked with vocational training tend to establish artificial and stigmatizing relationships between the purposes served and the people involved, between training and welfare. Vocational training does not diminish the number of low income jobs nor does it have any influence on the rate of unemployment in them.

The point to be emphasized here is that vocational education and training policies are implemented by numerous public agencies. These policies are not linked together nor combined as a mutually compatible overall policy. As the field of vocational education approaches the 1980's, it should terminate its role as a casual or a disinterested observer of present anomalies and disjunctures in vocational education and training policies. It should become an advocate of defensible policies as well as an active participant in policy development.

Summary

The four issues described above are compelling issues, compellingly close to any measure of determining the credibility of the field of vocational education in its relationship to the work force—its employability, its productivity, its rewards and its quality of life. A longer and more elaborate list could be assembled to add to the argument. More elaboration is not necessary. It is already clear that vocational education will be a marginal activity in the 1980's unless it confronts issues which are central to workers as well as those which are important to schools.

Professional Development for Vocational Education

Reacting to the trends in the field and confronting the types of issues described above is a formidable challenge. It requires priority and pivotal attention to the quality and commitment of people and institutions.

Vocational education has always functioned as the administration of programs prescribed by legislation and supported by activities regarded as ancillary. The ancillary activities, including teacher training have been more ancillary in approach than in character. Yet they have been central to the quality and credibility of the personnel and the institutions associated with vocational education. As the field moves into the 1980's, the aspects of the field heretofore regarded as ancillary will need to be refocused in the light of emerging demands in the field. Indeed, such demands are likely to be gauged by the capacity of the field to provide the inputs traditionally and casually viewed as ancillary.

Under the rubric of professional development, the next section of this paper will be addressed to these problems.

Expanding Concern for Preservice Teacher Education

From the viewpoint of present trends and the likely expectations for vocational education in the 1980's, the most difficult problem may be the creation of institutional capabilities for generating a flow of adequately trained instructors, teachers and leaders. If it is possible to accept the premise that vocational education will be available to the full age-range of the labor force, and will deal with productivity as well as employability, then it is necessary to conclude that present institutional capability is seriously inadequate. Several kinds of changes will need to occur, either through the strengthening of programs in existing institutions or through the creation of entirely new institutional arrangements.

First will be necessary to add vocational realism to the present preoccupation with competency-based teacher education. Added realism will begin when it can extend beyond the pedogogical competence of the teacher trainees to include the occupational competence of those who will be taught by the teacher. Competency-based teacher education which adds a vocational dimension, occupational competence, will place many added burdens on the institutions which train teachers.

Second it will be necessary to reexamine the reality of the traditional preoccupation of many fields of vocational education with skill training and its ritualistic steps of job and task analyses. Business and industrial productivity is determined by the efficiency of production processes, not on a preoccupation with the refinement of entry-level individual skills. Some of the needed reexamination has already occurred. Agricultural education has begun a "management approach" and business education is using "model offices." But most of vocational education, as well as its teacher preparation, is still tied exclusively to a skill training view of occupational competence. Vocational skill training may be sufficient if vocational education is to deal only with entry level skill training for those seeking initial employment. If it is to also include instruction of the labor force for updating, upgrading and retraining workers preparing for increased productivity, then it must include instruction in processes as well as in skills. Teacher education institutions do not have a sufficient capacity for such training.

Thirdly, it will be necessary to establish closer linkages between in-service education and preservice education. In-service education which does not have a feedback to preservice education is a costly proliferation. Moreover, a program of preservice education which cannot or does not feed forward to in-service education will soon lose its relevance and will soon become sterile. The credibility of both in-service and preservice education is diminished if they are not linked together in institutions having a central commitment to vocational education. Vocational education may now be at a stage of its historical development where the field of medicine was forty years ago. Plagued with proliferation and diminishing quality, the field of medicine decided to follow the recommendations of the famous Flexner Report and to reduce the number of institutions and concentrate on a smaller number which could be relied upon for quality and leadership.

Finally, it will be necessary for the field of vocational education to fully embrace a professional development concept. Still in its infancy, the growth of the concept is central to the realization of

program adequacy in the 1980's. The test of its growth will be whether it can develop as a field of policy development and leadership, scholarly inquiry, a field which sustains a flow of competent leaders and teachers at the highest level of competence, and one which can relate to the training and employment needs of the entire work force.

As the field of vocational education prepares for the 1980's, its most rewarding effort will be its attempts to enhance its limited capacity for looking to the future. Policy-makers, planners and other leaders can be expected to be among the first to indulge in such in-service training. This is clearly the most important requirement for in-service education for the 1980's and beyond.

References

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   b. Dumont, Rene, *The Hungry Future*, London: Andre Deutsch, 1969.

2. Major studies include the following:

   a. U.S. President's National Advisory Committee on Rural Poverty, *The People Left Behind*, Washington Government Printing Office, 1967.

   b. U.S. Advisory Commission on Inter-governmental Relations, *Urban and Rural America: Policies for Future Growth*, Washington Government Printing Office, 1968.

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RESPONSIBILITY AND ACCOUNTABILITY FOR IN-SERVICE VOCATIONAL EDUCATION PERSONNEL DEVELOPMENT

by Robert M. Worthington*

An Overview of Accountability in Education

Educational accountability has been a topic of considerable discussion in the literature. The journal material produced on this topic (according to the *Current Index to Journals in Education*) in 1972, about 150 articles; in 1973, about 160 articles; and in 1974, through August, approximately ninety articles. Research and related documents on this topic include about 100 items in 1972; about 110 items in 1973; and in 1974, January through June, about forty-five items.

Vocational educators and vocational education as a field provide a significant but not a dominant sector of this literature. Little has been written on the subject of accountability as it relates to teacher education and virtually nothing can be found in the literature on accountability for in-service personnel development.

In effect, then, in this presentation, assumptions must be made based on accountability and responsibility as applied to broad educational goals, including those of vocational education, rather than on specific reporting of data related to in-service vocational education personnel development.

Education becomes accountable when it establishes goals, sets specific objectives, devises programs to meet those objectives, carries out the programs, measures the success of the program, compares costs and results of alternate programs, revises and tries again.

Several aspects of the accountability concept will serve to strengthen personnel development programs. These include: designing performance objectives, specifying in advance desired outcomes, evaluating to find out if outcomes were as projected, using limited funds wisely by getting maximum return for dollars invested, by paying for results not promises, developing long-range plans.

There are inherent pitfalls in the accountability concept that must be avoided. One of these pitfalls is the possibility of searching for scapegoats to pin failure of a program on rather than to share responsibility for successes and failures. Another danger is over reliance on performance objectives to the point that illusions of efficiency are created where little exist. These pitfalls raise the serious question of who will establish the objectives and who will be accountable.

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Despite the still uncertain nature of accountability in education, many state legislatures and state education agencies have pushed ahead with accountability plans. State legislatures enacted, through 1973 in twenty-seven states, some educational accountability legislation. These laws cover state testing or assessment programs; evaluation of professional employees; performance contracting; planning, program and budgeting systems; management information systems and uniform accounting systems. A dozen or more other states have plans to adopt such legislation. It seems apparent that a legislative mandate for accountability will soon be universal.

A Definition of the Term Accountability

An excellent review of the literature on accountability by the North Carolina Department of Public Instruction (1972) included a collection of definitions. Some of the choice ones are:

Plutarch (2000 years ago): "Such fathers as commit their sons to tutors and teachers, and themselves never at all witness or overhear their instruction, deserve rebuke, for they fall far short of their obligation. They ought themselves to undertake examination of their children every few days and not place their trust in the disposition of a wage earner; even the latter will bestow greater care on the children if they know that they will periodically be called to account."

John W. Gardner: "The final justification of all the lofty educational policy, all the organizational efforts, is that somewhere an individual child learns something that he might not have learned, or grows in understanding, or gains in skill or insight."

Ewald B. Nyquist (New York State Commissioner of Education): "Accountability is a continuous willingness to evaluate education, to explain and interpret the results with all candor, to divulge the results to the publics or constituencies that need to know them, and to be personally and organizationally responsible for the weaknesses as well as the strengths revealed."

John W. Porter (Michigan State Superintendent of Public Instruction): "Accountability is the guarantee that all students, without respect to race, income, or social class, will acquire the minimum school skill necessary to take full advantage of the choices that accrues upon successful completion of public schooling, or we in education will describe the reasons why."

National School Public Relations Association: "Decide what you're going to do. Do it. Then prove you've done it."

Leon M. Lessinger: "Essentially, accountability means that schools: (1) Set goals of concrete, measurable improvements in pupil performance; (2) Subject results to an objective audit or evaluation; and (3) Report results to the public in clear terms."

"Accountability is a process in which an agent, public or private, entering into a contractual agreement to perform a service, will be held answerable for performing,

according to agreed upon terms, within an established time period, and with a stipulated use of resources and performance standards."

"Accountability means the ability to deliver on promises."

Lessinger, an early advocate of the movement, emphasizes that his definition of accountability requires the parties to a performance contract keep clear and complete records, and that this information be available for outside review. It also suggests penalties and rewards; accountability without redress or incentive is mere rhetoric.

Lopez (1971) defines accountability as a process of expecting each member of an organization to answer to someone for doing specific things according to specific plans and against certain timetables to accomplish tangible performance results. It assumes that everyone who joins an organization does so presumably to help in the achievement of its purposes; it assumes that individual behavior which contributes to these purposes is functional and that which does not is dysfunctional. Accountability is intended, therefore, to insure that the behavior of every member of an organization is largely functional.

One way of implementing the goal setting process that has been found useful in education is through the development of a "charter of accountability." Scheid (1965) described this approach which was originally developed by the Ground Systems Group of the Hughes Aircraft Company. The charter is agreed to by two individuals or groups—one in a superordinate and the other in a subordinate capacity—after consultation, discussion, and negotiation. Ultimately, the entire organization is covered by the series of charters beginning at the top with a major organization unit.

A charter contains a statement of purposes, goals, and objectives. Purpose constitutes the organization's reasons for existence and gives meaning to all its activities. Purposes, therefore, are usually stated in broad inspirational terms.

Goals and objectives are the tangible expressions of the organization's purposes. Goals are long-range, concrete, end results specified in measurable terms. Objectives are short-range, specific targets to be reached in a period of one year, also specified in measurable terms.

Frymier (1973) is concerned and perhaps rightly so, that there is a real conflict between "humanism" as a point of view and "accountability" as a process. Most of the "accountability" literature today he says is characterized by a devotion to measurable ends, an implicit belief that the ends justify the means. The other half of the educational equation has to do with educational means, yet many people are ignoring the ethical, human questions which are involved. Others believe that the United States Office of Education itself is fostering financial dependency among educational institutions by establishing conditional relationships (e.g., if the work is done then the funds are forthcoming). Obviously, school people are responsible for what they do; and for how they teach, administer, and supervise in schools.

The late James Allen (1971) in a paper prepared a few days before his untimely death, stressed that accountability can succeed only if it has the force of government and the profession behind it. Allen pointed out that accountability is more often than not considered in the narrow sense of assessment and measurement rather than in its broader and more definitive meaning of being responsible and liable. Thus defined, the question becomes: responsible to whom?

If we accept the premise that the schools belong to the people, the premise upon which our public school system has been developed, then the answer is obviously we are accountable to the public. But what is the public?

Is it society as a whole? It has generally been accepted that the education system serves society by producing valuable members, and this service encompasses everything from training people to be good citizens, to teaching them useful skills, to making it possible for each individual to reach self-fulfillment.

Is it the taxpayers? Here the responsibility seems very clear. The taxpayer supports the schools and deserves the assurance that his investment is worthwhile. The concern here generally is that the schools be run efficiently and that the tax bill not be too great.

Is it the parents? They look to the schools to educate their children, and by this they usually mean that they expect their children to be able to participate effectively in society and to be prepared to make a living.

Is it the students? This is the most direct and the most difficult responsiblity, for the school must deal with the dual task of considering and satisfying the needs and interests of both the present student and the future adult.

Obviously, the concept of accountability as responsibility is a very complex one, and the schools cannot be considered as accountable in any simple sense to any one group.

The education profession as a whole is, of course, enormously influential. Teachers' organization contracts contain provisions about many things beyond salary and working conditions.

The National Education Association (1973) has taken a position on accountability as it relates to teacher training and certification. In part, this position statement recommends that practitioners be involved at all levels in the certification process; that criteria should be developed for Competency Based Teacher Education and Certification; that minimum criteria be established for preparation and retraining of professional educators with emphasis on continued improvement in the quality of instruction through teacher renewal centers; and an important point for this conference: that in-service training should grow from needs identified by evaluation and should be paid for by the school district.

Local boards of education have the responsibility for the immediate operation of the schools, and their policy decisions, though shaped within the limits of state and federal laws and policies and relationships to the profession, in large measure, determine the nature of local educational opportunity.

The state has the legal responsibility and authority for the provision of education and its fiscal, regulatory, and supervisory functions profoundly affect the quality of local performance.

The federal government (even though it has only five or six percent of the overall investment in education) is assuming a much more direct and influential role.

Among all these interests bearing upon the schools, seeking to influence their performance, where is the push that gets action? Where is the force that can make accountability a working reality?

Most observers believe it is in government and the profession.

Even with better means of exerting their influence and wielding their power, the public has only a limited role. This is not to underestimate the importance of the public's role. Indeed, the public has to become more aggressive and unrelenting in its insistence upon performance as a measure of quality.

In-service personnel development requires a cooperative effort between federal and state governments, state and local education agencies, colleges and universities, schools, teacher organizations, community groups, business, industry and labor. This cooperative effort requires flexibility of all constituent groups and should not be controlled by any one group, even if that group controls the purse strings.

Competency-Based Teacher Education - A National Trend

More and more, teacher education programs in colleges and universities across the nation are installing the competency-based approach. Competency-based teacher education is seen as a reform mode as part of the accountability movement and the systems approach. The U.S. Office of Education through its Educational Personnel Development and Teacher Corps programs has made a commitment through 1975 to funding experimental and demonstration programs in Competency-Based Teacher Education.

The competency-based approach gives promise as a positive catalyst for change because it specifies objectives in explicit form, it holds prospective teachers accountable for meeting these specific objectives, and it is criterion referenced in that the degree of competency of individual students can be measured. The competencies are developed and tested on three types of criteria:

1. KNOWLEDGE — facts, principles, and information a future teacher is expected to absorb.

2. PERFORMANCE — behavior the student teacher is expected to demonstrate.

3. CONSEQUENCES — outcomes expected to be brought about in the intellectual and emotional growth of pupils by student teachers.

The characteristics of a competency-based teacher education program include: individualized instruction, instructional modules, time as a variable, field-centered instruction, and emphasis on exit competencies not entrance ones. The concept of competency-based teacher education lends itself readily to in-service vocational educational personnel development as an accountability strategy.

Nash (1971) reports that the growing commitment to the competency model in teacher education is usually based on the following assumptions:

1. Teaching can be reduced to a series of performance functions and can be analyzed according to types of teaching activities.

2. Because teaching consists of these various kinds of activities (e.g., explaining, guiding, demonstrating, testing and evaluating, skills imparting), the best teacher education program is one which develops these skills.

3. The performance or competency curriculum is rooted in a set of very clear objectives. This competency curriculum provides knowledge and develops skills to reach those objectives. Also, it systematically measures its effectiveness by checking on how well its trainees are fulfilling the objectives.

4. Such a curriculum is not concerned with liberal education, specialized knowledge in an academic area, the values and attitudes of the trainee, or the dilemmas of the larger society within which the school is located. Its primary and exclusive function is to train learning strategiests and communicators of skills. Its ultimate goal is to produce the teacher who has mastery of specific professional competencies.

Hill (1971) defines in-service education as the continuing education of a person who has previously developed the basic competencies required for entry into a position on the teaching team. The purpose of in-service education is to improve performance in the individual's current educational role. However, there has been a problem in vocational education in determining what is meant by in-service education because of the great diversity of entry-level competencies.

In-service vocational education personnel development programs must consist of planned, purposeful activities designed to positively change the behavior of the vocational educator. It must be recognized that there exists within the profession a difference of opinion as to who plans in-service programs. It is obviously too important to leave to one agency or institution. The ultimate accountability lies with the state and the profession. Caution must be exercised to insure that all concerned agencies, school districts, universities, colleges, community organizations, and professional groups are involved in the planning and implementation. Systematic planning for in-service vocational education personnel development is essential to assure appropriate designation of responsibility and accountability.

In-service education is an individual responsibility of every vocational educator based on an evaluation of individual needs and goals. The ultimate individual responsibility, however, does not relieve educational administrators, teacher educators, and other leaders of their responsibility for providing necessary resources and strategies for making in-service education a reality.

A basic research effort is needed to develop workable techniques for statewide master planning for in-service vocational education. Several states have developed master plans but have had difficulty implementing them because of the large number of institutions and agencies involved. Research in in-service vocational education personnel development has been somewhat limited. The federal EPDA program which could have made a major contribution to research in this field has been administered by persons outside of vocational education.

Recommendations

1. Caution must be exercised in applying accountability to vocational education personnel development because of lack of research evidence to show that teacher performance has improved and that students have benefited from it.

2. The development of a "charter of accountability" for in-service vocational education personnel development agreed to by all concerned after consultation, discussion, and negotiation should be considered.

3. In an era of accountability and increased competition for funds, it is essential that every state develops a long-range plan for vocational education personnel development.

4. An expanded research effort must be initiated at the national, state, and local levels to improve evaluation, and needs techniques applicable to in-service vocational educational personnel development.

5. Decision-making affecting in-service programs must be structured to involve every group, institution, and agency concerned. Centralization of decision-making risks removing accountability from those most concerned in local districts and on the campus.

6. The concept of competency-based teacher education as an accountability strategy must be further refined for use in in-service programs.

7. An administrative body must be designated at the highest level possible in state government to be responsible and accountable for in-service programs.

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Chapter II

Industry, Business, and Education Cooperation

IN-SERVICE PERSONNEL DEVELOPMENT PROGRAMS FOR IMPROVING TECHNICAL COMPETENCE IN TEXAS

by Hiram H. Goad*

The Employer/Education Personnel Exchange System in the State of Texas

At the First National Workshop on Comprehensive Vocational Personnel Development and Utilization at Washington, D.C., June 15-17, 1971, John F. Connors addressed himself to the role of industry and business in professional development of vocational-technical educators. He called for a partnership to improve leadership and upgrade professional programs and teacher competencies. He urged the development of an effective system of interchange. He called for action at the local level, saying "The local scene is the action scene."

While such a plea was not new to vocational-technical educators, it was especially pertinent since the statutory authority in the Education Professions Development Act provided for:

> Exchange of vocational education teachers and other staff members with skilled technicians or supervisors in industry . . . and the development and operation of cooperative programs involving periods of teaching in schools providing vocational education and of experience in commercial, industrial, or other public or private employment related to the subject matter taught in such school. . . .

In Texas, the State Plan of Action for the Texas Personnel Development System for 1973-74 set as a priority the development of a program of personnel exchange.

> To enable vocational teachers to acquire new or increased expertise in their skill areas or in their instructional domain by a rapprochement with industry and government through a temporary exchange of individuals in a regular, formal program. (This will include released time for teachers.)

The Advisory Council for Technical-Vocational Education in Texas had previously recommended implementation of a system of educational exchange with industry and business as a part of the state's regular in-service education program.

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A pilot program was authorized beginning in August 1973, funded under provisions of the Education Professions Development Act. The real purpose of this effort was to develop a workable personnel exchange program for vocational-technical teachers and other professional staff.

The objectives were stated in the initial proposal document as follows:

1. To provide opportunities for vocational-technical education teachers and ancillary staff to obtain current training and work experience in their occupational fields to improve their teaching competencies.

2. To provide input through assignment of non-educational exchange personnel to jobs in education for the improvement of curricular content, teaching methods, and student services.

3. To stimulate the creation of a self-supporting system of industry, business, government, labor, and education personnel exchange in the state of Texas.

4. To provide public information on effective procedures for personnel exchange which evolve during the project operation.

To obtain data which would be helpful in designing a system for the state, it was proposed to provide work/training experience in specific occupational fields for about fifty vocational-technical education teachers and ancillary staff.

To develop this experimental phase of the project operations, it was essential that the proper interface with industry, business, labor, and government be established. To accomplish this, a group of industrial and business training and development managers, professional vocational teacher educators, and vocational-technical teachers and administrators were sought who were willing to serve on an action and results oriented advisory council. It was made clear from the outset that this council was to be a working task force who were charged with the development of a workable personnel exchange system for the state of Texas.

During the course of the year, five public hearings and work sessions were conducted by the Council. Out of these activities, the Council formulated a set of recommendations which were transmitted to the State Department of Education, September 24, 1974, as follows, in part:

> The Advisory Council for Industry/Business and Education Personnel Exchange is vitally interested in meaningful in-service education for vocational-technical education personnel employed in the public schools and post-secondary institutions in Texas.
>
> Such in-service education should include a system of personnel exchange which will provide opportunities for vocational-technical personnel to obtain current training and work experience in their occupational fields to update and improve their teaching competencies.
>
> To obtain a workable system of personnel exchange, the Advisory Council makes the following recommendations:

1. The State Board for Vocational Education should endorse a policy requiring periodic in-service work/training experience.

   The Council believes that a general endorsement is desirable. In addition to personnel exchange fostered under a program of supplemental or extended contracts, local work/training experiences may be developed utilizing the present ten days of in-service education and released time provided by the local school.

2. The State Board of Education should create a permanent full-time staff position to administer the vocational-technical education personnel exchange.

   The Council recognizes that unless leadership and coordination are provided at the Central Education Agency level, an effective in-service education system of personnel exchange will not likely be developed.

3. Supplemental or extended contracts should be provided for personnel who will participate in the in-service education personnel exchange program including travel allowances when appropriate.

   In most cases, the Council feels that the personnel exchange should be carried out on a local basis. However, to take advantage of certain industry and business training programs conducted at training centers, travel funds should be provided on an individual basis.

   The Council feels that to obtain a true updating experience, the participants should be paid by their employing school. Otherwise, the experience may be more in the nature of a work assignment or "summer job" than updating of occupational skills. The Council recognizes, however, that some businesses and industries may wish to pay participants who will be working in their organizations.

   It is recommended that in these instances, such payments should be made in the form of grants to the employing school rather than to the participating teacher.

4. The Department of Occupational Education and Technology of the Texas Education Agency should devise a plan of professional development for all vocational education staff members in the state. The plan should require each staff member to prepare his own five-year professional growth plan.

5. A directory of training opportunities should be prepared and made available to all vocational education staff.

The Council believes that this effort should take place at the local level in most cases. Local advisory groups; professional societies, such as the American Society for Training and Development and the American Society for Personnel Administration; and other community resources should be engaged in the development of training opportunities.

6. The Texas Education Agency should encourage teacher training institutions approved to prepare vocational personnel to grant credit for occupational experience under a state-approved personnel exchange program.

The Advisory Council wishes to express its appreciation of the opportunity to work with you and the Texas Education Agency in this important effort to add a new dimension to professional growth and development programs for vocational-technical education staff in Texas.

Members of the Council participated in the National Workshop on Business-Education-Labor Professional Development Partnership in Denver, Colorado, May 5-9, 1974.

Serving as members of the Texas team, they met with other state teams from Colorado, Idaho, New Hampshire, New Jersey, North Dakota, and Oklahoma, in group meetings and in individual state sessions to develop a model for personnel exchange for each of the states involved. The Texas model was reviewed by the Advisory Council for Industry/Business and Education Personnel Exchange and served as a basis, in part, for the final set of recommendations made to the State Department of Education.

Largely through the efforts of the Advisory Council, personnel exchange sites were selected and over 100 vocational-technical teachers and other staff—administrators, supervisors, and counselors—participated in the program in the period, September 1, 1973 - August 31, 1974.

During the course of the year, a series of planning conferences were held throughout the state involving over 300 industry, business, labor, government, and education representatives focusing on issues relating to personnel exchange. The San Antonio conference was keynoted by Louis G. Mendez, Jr., federal coordinator, Industry-Education-Labor, U.S. Office of Education. These conferences demonstrated the need for intensive cooperation between employer and education groups, and in particular suggested that increased attention should be given to strengthening the local advisory committee system.

The Texas Industry Council, under the leadership of Dr. Walter Kerr, Coordinator for Industry-Education-Labor for the State of Texas, adopted a policy statement on June 18, 1974, committing the Council to:

Provide a mechanism for influencing the opportunities for in-service teacher education in industry.

This policy position can be of vital importance in the functioning of the Texas system of personnel exchange. The Texas Industry Council, since 1967, has organized fifteen statewide citizen

groups paralleling the fifteen career education clusters suggested by the U.S. Office of Education. Over 600 leaders in business, industry, manufacturing, agriculture, health, and other occupational fields provide assistance with a statewide scope to the State Department of Education in all areas of vocational and technical education on a systematic basis.

The teachers and other vocational-technical education staff involved in the pilot program were, without exception, highly positive in reporting their work/training experiences. While this type of information is obviously statistically inconclusive, it does provide a base for additional work toward development of a design for measuring increments of increased professional competence and other evidence of growth and development as the personnel exchange system becomes fully operational.

The involvement of industry and business in long-term cross training and work experience is more difficult. There were some outstanding successes in this pilot program. The IBM Corporation funded a full-time teacher for a full school year to work in one of the state's developing community colleges. However, there are serious problems of certification under state law, safety, compliance with local district policies, and others. The problem definitely is not one of lack of interest on the part of industry and business. It is within the education sector and, with good will and hard work on the part of all involved, an effective system of personnel exchange based on the manpower pool concept common to large scale international educational exchange programs will be achieved.

A spin-off of this pilot program has been the organization of a series of planning conferences with Regional Technological Institutes in northern Mexico bordering the state of Texas. An interim evaluative report of the Region VI, U.S. Office of Education, described this effort as follows:

> As a result of the director's efforts and the progress this program has made in a short time, another significant international program is being initiated to exchange personnel between vocational schools, Technological Institutes and industries in Mexico and Texas. It will be tracked carefully by central office in Washington and by other states. It appears to be a major breakthrough in international relations, and bilingual curriculum development and technical education.

It appears possible that this activity may be expanded under the provisions of Section J, Bilingual Vocational Education, when that legislation is implemented.

For the remaining few months of the project, the following activities have been outlined in a Plan of Action:

> As a continuation of EPDA Project 74-11R, the operational objectives of the 1975 personnel exchange project remain essentially the same: to provide opportunities for vocational education personnel to obtain current training and work experience in their occupational fields; to provide non-educational personnel opportunities to work in an educational setting; to create a self-supporting system of personnel exchange; and, to provide information concerning the project.
>
> A major function of the project is to provide effective interface with industry-business-labor-government and education. A state advisory council was named to assist in this effort. The principle charge to the council was to seek ways to develop a viable system of personnel exchange.

Personnel Exchange Activities

To further the adoption of a workable personnel exchange system, a number of project activities will be carried out, among them:

1. A handbook for personnel exchange will be published.

2. A guide for personal growth and development planning will be published for use by vocational education personnel.

3. The implementation of recommendations of the Advisory Council for the project will be pursued at the state level through appropriate channels.

4. Orientation, planning, and evaluation conferences will be conducted throughout the state with selected groups of educators and representatives of industry-business-labor-government to encourage the establishment of a local or regional base for future personnel exchange which may be sponsored by the Texas Education Agency. These conferences will be coordinated with the Texas Advisory Council for Vocational-Technical Education to insure maximum impact.

5. A directory of work/training opportunities will be prepared both in education and industry-business-labor-government.

6. A survey which will project the need for work/training experiences by vocational education personnel for the next five years will be conducted using criteria for eligibility established by the project with the advice of the Advisory Council. The results of this survey will be furnished to the Texas Education Agency for budgetary planning for the two ensuing bienniums plus one year.

7. Personnel exchanges, based on the successful experiences of 1974, will be carried out in 1975 within the limits of available funds.

8. A plan for the influx of non-educational personnel into the educational setting will be developed through consultation with educators, representatives from industry-business-labor-government, and the project's Advisory Council. This is a difficult area in the field of personnel exchange and will require determined and sustained effort to achieve a workable solution.

9. Liaison will be maintained with Educational Program Directors and other officials of the State Department of Education, with professional teachers organizations, and other educational groups.

10. Liaison will be maintained with industry-business-labor-government groups, professional and trade organizations, and emerging employer-education councils in urban centers.

The Advisory Council Activities

The main function of the Advisory Council will be to continue the development of a system of personnel exchange for vocational education in Texas.

The Council will pursue the implementation of its recommendations to the Texas Education Agency, including the State Board of Vocational Education, and seek corrective legislative action as required.

The Council will conduct a minimum of two hearings dealing with the guide for teachers and other vocational education personnel, the handbook for personnel exchange, and the influx of non-educational personnel into the educational setting, the localization of personnel exchange, and related matters emerging from its recommendations and consultative duties.

Information Activities

The sound/slide presentation concerning personnel exchange in Texas, the development of which was funded by the Council through a grant from Brown and Root, Inc., will be duplicated and distributed through the Regional Education Service Centers of Texas.

Public information will be provided to the media along the same lines as in 1974.

A final report will be prepared reflecting the full operations of the project which may assist in replication in other states.

The pilot program in personnel exchange has been most successful. A great number of people supported it with interest and enthusiasm.

At the last meeting of the State Advisory Council for Industry/Business and Education Person-Exchange, the Chairman of the State Board of Education and the State Board of Vocational Edu-on summed it very well when he said:

Your program of interchange of personnel between education and business and industry is an idea whose time has come. On behalf of the State Board of Education which is also the State Board of Vocational Education, may I assure you that you have our whole-hearted support of your efforts to bring teachers and counselors into Texas business as it is and not as it was. Even more important, in my opinion, is participation by business and industry in education. The people here today are well aware of this problem. Now the problem is how to make everyone in business and industry, and everyone responsible for educational policies and operation, equally aware.

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IN-SERVICE PERSONNEL DEVELOPMENT PROGRAMS FOR IMPROVING TECHNICAL COMPETENCE IN OKLAHOMA

by Zed DeVaughan*

Occupational Skill Updating as Tried in Oklahoma

After World War I, a popular song contained the words, "How are you going to keep 'em down on the farm after they've seen Paree?" Today, leaders in vocational-technical education are concerned with how to update the occupational skills of teachers while they continue to be employed full-time in school classrooms and shops. This is no simple problem and no pat answer has yet been found to it.

Oklahoma's T and I teachers have posed a particular problem to those charged with providing appropriate in-service education. The majority of the T and I teachers have been recruited from industry within the past ten years and many are still attempting to acquire the BS degree and a standard T and I teaching certificate. At the required rate of eight semester hours per year, this requires a good portion of the teacher's free time. Full-time day teaching, moonlighting two nights a week teaching adult evening classes, and completing the required eight semester hours of work toward a degree leaves the teachers with little time or inclination to update their occupational area skills.

Most T and I teachers come into the program with less than a full semester of college credit. After passing the appropriate occupational competency exam, which can give them another twenty-four hours of college credit, they still find themselves some 100 semester hours away from the BS degree in Trade and Industrial Education and a Standard T and I Certificate. Oklahoma's problem may or may not be unique but under the leadership of State Director Dr. Francis Tuttle and State Supervisor of Trade and Industrial Education Dr. Roy Ayres, something is being done toward updating occupational skills of vocational teachers. T and I teachers have been made the bull's-eye of the target but other occupational areas ring the bull's-eye.

The attack on the problem really became serious in 1970 when one of Oklahoma's first EPDA projects was an industry-vocational education exchange program sponsored by Southeastern Oklahoma State University at Durant. As the program actually unfolded, it turned out not to be a true exchange program as few individuals ever actually changed places with vocational teachers. What did happen was that Southeastern Coordinator Gordon James, an educator, as well as a skilled craftsman, located slots in business and industry where vocational teachers could upgrade their occupational skills at night, on weekends, or in the summer.

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EPDA funds paid the coordinator, student's enrollment fees, and a modest stipend to assist in offsetting community costs or additional living expenses of participants. Participants worked at jobs in the business or industry that updated their skills in the occupational area they taught. Auto mechanics teachers and auto body teachers worked in garages; machine shop teachers went back to operating lathes, milling machines, grinders, and drill presses for pay where their tolerances had to be within acceptable limits. Carpentry teachers hired out with building contractors where once again they worked as an apprentice to a master craftsmen. The list could be lengthened considerably as experience was given T and I teachers in some fifteen occupational areas.

As mentioned earlier, T and I teachers were not the only benefactors of the program. Nursing instructors went back on the floors of hospitals; business education teachers returned to work as secretaries and office managers; DE teachers returned to the sales floors; and food service teachers went back into the kitchens of commercial food services. Here again, the list is not meant to be complete but only to indicate the variety of experiences that have been provided through Southeastern's programs.

Those teacher educators and others who may be wondering about the respectability of a college or university sponsoring such a program may put their fears aside. T and I and other teachers enrolled in the exchange program which could have more appropriately been titled "Occupational Update," worked out the objectives they expected to accomplish. The project coordinator then drew up a contract between the vocational teacher, the business or industry providing the update experience, and the university spelling out the responsibility of each party. When the contract was complied with by all parties, appropriate graduate or undergraduate credit accrued to the vocational teacher. Prior arrangements had been made by the project coordinator to see that the credit obtained by the update could be transferred to the institution of the participants choice.

While the "update" project at Southeastern has not yet been perfected, it continues to improve and is currently in its fifth year. It is realized that this single project cannot alone update the occupational skills of vocational teachers. Many other approaches to providing update experience are being tried or are in the planning stages. Oklahoma was one of the first states to become involved in the consortium of states that developed the National Occupational Competency Exam now being administered by Educational Testing Service of Princeton, New Jersey. The state saw the test not just as a way for those tested to receive college credit for their trade competencies, but to let vocational leaders know the competency level of their trade teachers. The state continues to encourage teachers to participate in the competency exams by paying all examination fees of those actively engaged in teaching. Plans are to continue this practice.

In addition to programs sponsored by educational institutions and professional testing services, vocational teachers are encouraged to take proficiency exams sponsored by trade organizations. Some half a hundred auto mechanics teachers in the state proudly display certificates awarded them by their trade organizations issued as a result of satisfactory performance on a trade proficiency test. The state refunds the cost of taking the exams to those successfully completing such tests. The test cost refund policy also is not limited to T and I teachers. Recently two qualified vocational business teachers had their examination costs refunded when they passed the exams and each became a "Certified Professional Secretary." The policy is planned to extend this option to other vocational areas.

In the planning stage are cooperative efforts between vocational education and the Association of Central Oklahoma Governments to develop an exam for certifying plumbers, electricians, and

other trades. Vocational and technical officials plan to encourage teachers in these areas to take the exam whether or not they expect to practice their trade and teach in any of the cooperating cities.

The variety of activities that has been outlined is designed to update the occupational skills of vocational teachers. Other uses of the activities will also be made. For one thing, state education officials, as a result of the testing programs, will have an inventory of trade deficiencies as well as competencies. Future in-service programs will be planned to eliminate deficiencies. Oklahoma plans to continue to utilize the "carrot" approach to encourage vocational teachers to continue to update their trade competencies. What has been tried has worked to a degree, but vocational-technical leaders in Oklahoma are committed to continue to seek other methods of updating skill competencies and to expand them to cover all occupational areas. Oklahoma has not figured out how to regularly get vocational teachers back into business and industry, but it is still trying. By the way, the state doesn't believe that the U.S. was completely successful in getting the boys back "on the farm after they've seen Paree."

SOME IN-SERVICE PERSONNEL DEVELOPMENT PATTERNS NEW YORK STATE

by Robert J. Ullery*

I am pleased to have this opportunity to share with you some recent approaches in New York State resulting in improved teacher competency. To assume that any of these patterns are wide spread, typical, or part of a universal state plan would be incorrect. This is merely an assemblage of a few ways that some New York State teachers have received some education. I believe that you will agree there is promise in some of these approaches although none are intended to be a replacement for on-campus studies.

It would be incorrect for you to assume that all of these patterns have evolved under my direction or as a result of any leadership which I may have exercised. We are a giant team in New York State with my portion of the total responsibility usually exercised through others rather than directly. Our state was one of the first to appoint a full-time industry-education coordinator. The services of this office, which I feel are closely related to all other services in the State Education Department, are extended across the state with a series of regional industry-education coordinators each of whom exercise the responsibilities of their position in a multi-school district area somewhat coterminous with existing labor markets. My purpose in highlighting the industry-education coordination role is by way of explaining the route from which have stemmed most of the examples to which I will refer:

A. An early activity, subsequent to the initiation of the Industry-Education Coordination office, was communication with member organizations of the National Industrial Council. Our purpose was to determine what education needs had yet been unmet. A variety of responses were received leading to several in-service education programs one of which I shall outline. Our contact was with the Aluminum Association. It was our hunch that perhaps occupational education programs in that portion of our state having aluminum production facilities might have a unique need for trained persons for those plants. We found, however, that the needs were somewhat different. The Aluminum Association identified three needs, each of which have subsequently been met. The Aluminum Association explained that change orders on new building construction frequently substituted iron or plastic products for aluminum because competent craftsmen could not be employed in a particular region for on-site fabrication of aluminum products originally specified by architects and engineers. After consultation with the

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Association it was agreed that we would survey our education institutions at the secondary, post-secondary, and manpower training levels to determine teacher competencies in aluminum welding techniques; the extent of present offerings and the need for teacher training. Our results suggested a need for teacher upgrading. A workshop was organized with contribution by the Aluminum Association. A continued relationship exists and supplemental workshops will be operated as appropriate. Other needs identified by the Aluminum Association included the development of training materials and introduction, within construction courses, of those special techniques related to the application of aluminum siding. A third need was that of acquainting persons responsible for electrical wiring instruction with the unique considerations related to the application of aluminum products. Each of these needs was met with cooperative efforts between the industry and the Education Department.

B. While working with a contractor related to career development within the banking industry, I learned that the same contractor had been engaged in the development of materials related to the food industry. This knowledge and a referral to the National Commission on Productivity revealed a teacher education need for persons providing instruction to students preparing for employment in the food service and related industries. As you know, food stores and restaurants comprise the largest number of retail establishments and represent one of the largest fields of inflation during the last decade. Many studies have revealed ways of decreasing food costs through improved productivity. Some examples of such improvements would include standardization of packaging allowing the palletizing of all food products; a uniform system of weights and measures (apples are now shipped in thirty different sizes and varieties of containers). Productivity extends to more efficient utilization of personnel in food serving establishments. Records indicate that a low percentage of restaurant managers have had much specialized preparation for their jobs, a factor which may be partially responsible for the high percentage of business failures in this field.

   Our studies indicated that the field of productivity was hardly mentioned in most secondary or collegiate courses related to the food industry. We, therefore, took the necessary steps to arrange for a teacher training seminar for those persons providing food related instruction in home economics, trade, and manpower training programs at the secondary and post-secondary levels in our state. This program was administered and staffed without cost with industry and labor support in cooperation with the National Commission on Productivity.

C. Educator training should extend to school administrators as well as teachers. Frequently, however, it is difficult for administrators to free themselves or to analyze their needs effectively to determine with pinpoint accuracy the areas in which training is needed. A unique new program has been inaugurated in our state which we hope will be helpful in better acquainting school district administrators with ways in which their responsibilities can more

effectively relate to the needs of government, business, and industry which together account for the marketing of education's product—students. We refer to our new program as Club 20-20—a program to improve the vision of its participants. Our program commenced with the solicitation of school district administrator participation in a geographical radius of approximately twenty miles. We arbitrarily selected twenty school administrators within this radius and proposed to them the possibility of a reciprocal monthly visitation with a nearby business/industry leader. We found school superintendents to be highly receptive and proceeded, with the cooperation of organizations such as chambers of commerce; manufacturing associations; the National Alliance of Businessmen and others, to find an equal number of business and industry managers willing to commit themselves to one day per month to meet on an individual basis with school administrators alternately in the school administrator's office and at the business or industry.

We have assumed that the mature individuals representing industry and education will evolve for themselves an agenda which can be both mutually supportive and beneficial in their respective areas of responsibility. We foresee this relationship leading to similar reciprocal visitations at lower echelons in both industry and education. We foresee also the extension of work experience programs for both teachers and students. The exchange of course offerings within education and industry for employees and for students. We foresee an extension of existing academic credit relationships allowing employee training programs to become creditable toward collegiate studies in nearby educational institutions or as a part of qualification leading to the New York State External Degree.

D. We have borrowed an idea, which to my knowledge originated in England, and have modified it somewhat for another exciting in-service education program. Near Buffalo, New York, and under the direction of Mrs. Dorothea W. Sterne, industry-education coordinator for that region, a program has been developed in which teachers leave their school assignments for one day per week over a twenty week period reporting for that day to work at a nearby business. The relationship between the teacher and business is tailored in accordance with the needs of the business and the teacher participant ranging from working at an entry level assignment to a combination of work and observation at a variety of levels within the business. This alone would not be of unusual value but the balance of the project includes a commitment by the business to send a person each week to the teacher's classroom, not for the purpose of providing instruction in the curriculum, but rather, to answer student questions regarding employment considerations in that business. Each week a different employee is sent to the classroom representing a different department within the business. Instructional continuity is not seriously effected; teachers gain; students gain; the business gains; and probably participants in the program will recognize this experience as far more valuable than some other educational experiences.

E. Recognizing that the most effective career guidance frequently occurs in the classroom rather than in the specialized career guidance office, a number of career awareness workshops have been designed for classroom teachers. These workshops enroll general as well as occupational educators and are probably best exemplified in the pattern existing in the Erie County area where the program is administered for graduate collegiate credit in cooperation with the State University College at Buffalo. This program now has three sections of twenty-five participants each which meet weekly throughout a semester at a variety of businesses, industries, and government agencies in and around the Greater Buffalo area. Each session involves presentations by industrial management as well as blue collar representatives and provides an opportunity for participants to become better acquainted with the wide variety of career opportunities in the region. Although these programs have been designed to commence at 4:00 p.m. and terminate at 6:30 p.m., many of the industries have hosted the group for dinner and provided additional program content resulting in participants remaining into late evening. Obviously this kind of background and understanding can be most influential as the teacher returns to the classroom.

F. A modification of the career awareness workshop with an objective more directly related to instructional content is the Community Resources Workshop by now well established in many parts of the United States. A typical Community Resources Workshop would be operated during a four-six week period as a part of the summer recess. It would provide, as the one in Central New York did last summer, an opportunity for teacher participants to visit one or two community resources each day. In addition to businesses and industries, provision is usually made for government agencies, chambers of commerce, industrial development authorities, museums, art galleries, and social service agencies. Usually teacher participants in the Community Resources Workshops are both becoming familiar with career opportunities, and developing curriculum materials related to their respective instructional fields. A frequent by-product of the Community Resources Workshop is a regional directory including information regarding a wide variety of businesses and industries classified as to their willingness to accommodate student field trips; to provide classroom speakers; to provide instructional materials, or to provide summer work experience for teachers and/or students.

G. Facilitation for the variety of in-service programs which are cooperatively sponsored by educational institutions and industry is provided through the existence of industry-education councils. One such council in New York State now has 144 participants, another in the New York City area has nearly 100 participants many of whom are the education representative for large corporations, trade, or professional organizations. The linkage which industry-education councils can provide is an essential ingredient. Local councils can be chartered by a national organization having similar purposes. You may be interested in more information through contact with the National Association for Industry-Education Cooperation, 235 Hendricks Boulevard, Buffalo,

New York 14226. The value of regional industry-education councils is attested to at least in part by their activity. I have observed, for example, on more than one occasion over 300 persons in attendance at a breakfast meeting of the Niagara Frontier Industry-Education Council.

H. Part of the magic formula for success in any endeavor is to take advantage of existing conditions. We have discovered the existence of a wide variety of organizations willing and committed to purposes closely related to ours. One such relationship involves existing Economic Education Councils. These groups are usually funded with contributions from business and industry. The regional councils and the Joint Council on Economic Education have as one of their several purposes that of teacher education. They frequently hold one or two day seminars and also have a pattern for on-campus program offerings to the end that more teachers might become more familiar in the general field of economics. Recently representatives of several offices within our State Education Department in Home Economics, Business Education, Social Studies, and other occupational education fields conferred with state and national economic education council representatives resulting in an opportunity to develop an in-service education project proposal to be totally funded by resources of the Economic Education Council.

I. Another existing organizational interest is that of the American Management Association. AMA is a chartered educational institution under the New York State Board of Regents and provides a variety of services of interest to both industry and education. The potential of these services has not yet been widely utilized as far as teacher education is concerned but a student oriented program is provided for both secondary and two-year college participants. The program consists of a two week residence experience for groups of selected students in which they participate with some giants of American industry to learn first hand, in groups of thirty-five, of some of the contemporary problems and opportunities of American industry. This program, Operation Enterprise, is maintained for secondary school students at the American Management Association Center for Innovation at Hamilton, New York, and for post-secondary students at Eckerd Community College in Florida as well as other locations commensurate with demand. Most participants in the Operation Enterprise program are provided scholarships and maintenance funding by industry. Should you wish additional information on this program contact should be made with Mr. Robin Schade, Director, Operation Enterprise, American Management Association, The Center for Planning and Implementation, P. O. Box 88, Hamilton, New York 13346.

J. Many industries have formed their own trade associations similar to the Aluminum Association to which I have previously referred. In many instances the trade association has developed an education department with its purpose and focus geared both to educational interests within the industry and to those of educational institutions. One such national organization is the Plastics Education Foundation jointly sponsored by the Society of the Plastics Industry and the

Society of Plastics Engineers. The Plastics Education Foundation develops instructional materials, provides teacher education workshops, and is a clearinghouse for surplus industrial equipment suitable for instructional use. The resources of this Foundation as well as its counterparts representing other industries should not be overlooked as educators attempt to provide meaningful in-service education programs. It is possible, for example, for a college to contract directly with the Plastics Education Foundation for in-service teacher education programs which will be closely tailored to industrial needs in the geographical area without regard to the existence of a plastics instructional program in the institution. In several instances this relationship has resulted in the development of regular on-campus programs with strong support from industry. Additional information concerning workshops in cooperation with the plastics industry may be obtained from the Plastics Education Foundation, Education Director, Mr. Maurice Keroack, 1913 Central Avenue, Albany, New York 12205.

K. Still recognizing the existence of other organizations, we have taken steps in several parts of our state to build upon the existance of a number of professional societies. We have, for example, in one region formed a council of fifty-five different scientific and technological societies in order to provide modus operandi where by these organizations can be of optimum value to themselves and to others education wise. Frequently local chapters of national societies have an education chairman who has reached a point of frustration in an effort to find an effective way to work with educational institutions. The Council of Scientific Societies provides an avenue for the development of a common calendar for society meetings for the development of joint meetings between the professional or scientific society and a teacher organization with similar and/or related concerns. The Council may also represent any portion of its membership in the development of teacher training activities in a specific field. One such current example is the adoption by the Capital District Council of Scientific Societies of a school district for the development of a project which will involve teacher education as well as a host of other activities for a total immersion of the school district in the field of metrication.

L. The engineering field is of interest to many of today's youth and the engineering profession is anxious to provide up-to-date, valid information concerning supply and demand as well as referral to educational institutions which are properly accredited for the preparation of persons for service in the many engineering fields. One medium for this activity is the sponsorship of local JETS chapters. The Junior Engineering and Technical Society has a large appeal for students aspiring to careers in the engineering and engineering technician level fields. The Joint Council of Engineering Societies at the national level, 345 East 47th Street, New York, New York 10017, is anxious to provide in-service education to teacher sponsors of local JETS chapters as well as continuing surveilance and assistance of local chapter programs as they become active.

M. Money management is necessary by us as individuals, by business and industry as they attempt to make a profit and, hopefully, also by government agencies

as they attempt to balance available resources with the demand for services. In recognition of these needs the New York Stock Exchange provides an opportunity for in-service teacher education with a goal of improving the background of teachers in all disciplines so that they can incorporate appropriate effective and meaningful instructional content in the many management fields within existing curriculum. The capacity of the New York Stock Exchange has been underutilized in this regard. Your inquiries should be directed to Dr. Allen O. Felix, Education Director, New York Stock Exchange, 11 Wall Street, New York, New York 10005.

N. The National Alliance of Businessmen has been more or less active in several regions across the United States. Leadership for NAB at the national and regional level has come from voluntary contribution of business and industry which have placed management personnel on loan. Several projects of NAB are directly related to youth and to educational institutions. We have found it most effective to work closely with NAB at the regional level to adapt their objectives to our needs. One of several programs offered through this sponsorship is the Career Guidance Institute. This Institute usually takes the form of an in-service teacher or guidance education program wherein participants visit business and industry, interview personnel and management officials, and also hear from Labor Department and other officials with a goal of becoming more well qualified in the field of career guidance. Although these programs were originally designed to serve the guidance profession exclusively, we have encouraged the broadening of the concept to include classroom teachers and have been encouraged by the receptivity and the participation of classroom teachers.

O. Teacher education and in-service experiences come in many forms. The Industry-Education Coordination office in the New York State Education Department in cooperation with a statewide professional educator organization organized ten summer tours of industry. Each of these tours was designed for teacher participants and their families who would provide their own transportation, their own food service, and their own overnight accommodations for a full week of visitations which had been pre-arranged in a variety of industries closely related to occupational education instructional fields. Ten different industrial visitations comprised the total week with the distance between morning and afternoon visits not over ten to twenty miles but with the distance between days perhaps as great as fifty miles. A week of visits related to the transportation industry, another to the electric industry, another to graphic arts and photography, another to the ceramic industries, another to woodworking industries, still another to the textile industries. No part of the state was untouched.

A similar pattern designed exclusively for home economics teachers involved tours to a variety of industries closely related to the interests of home economics teachers.

P. At present a bus tour to large industries in four states is being planned in cooperation with the New York State Association for Vocational Industrial Education Organizations. This will provide an opportunity for over forty educators including a few vocational educators from European countries to visit large industries in New York, Pennsylvania, Ohio, and Michigan. The tour will commence on the Monday following Easter and run for six days. The cost to participants is less than $200 for transportation, overnight accommodations, admissions where required, and for food service of two meals per day. Although this is designed chiefly for New York educators and four or five vocational educators from Europe, we will welcome your inquiries and may be able to accommodate a few from out of state on a space-available basis.

In-service education is a very small portion of my total responsibility as industry-education coordinator. Frankly I was rather surprised, in preparing for this presentation, to realize in how many instances our activities have related to the need for upgrading educators. In a survey of the Fortune 500 Corporations doing manufacturing or distribution in our state we found many responses to indicate a need for improved teacher education. The recognition of this need on the part of industry is a long step toward success in involving industry in-service program development. The industry-education coordinator serving in the Rochester area has recently, with the Industrial Management Council representing nearly 90 percent of industry in that part of our state, begun to refine an approach for teacher upgrading through summer activity with industry. In another part of the state an opportunity is provided for students to serve an internship program to executives for academic credit. We are exploring cooperative arrangements with the American National Red Cross for academic credit for student participants in a variety of voluntary assignments for which the American National Red Cross will serve as a broker on a regional basis. We already have many school districts offering academic credit for students participation in Junior Achievement. You may have noticed a recent story regarding a Career Apprenticeship Program (in the October 20th edition of the Parade newspaper supplement) currently operating in the Spring Valley schools in the Lower Hudson Valley. While this program relates directly to students, rather than teachers, it should suggest a continued need for teachers to become familiar with the activities of other agencies which are so closely related to the purposes of education. It also emphasizes the interest of industry in the future of our youth.

Industry is frequently more ready to be of assistance than educators are to receive such assistance. Surely this presents a challenge and many opportunities for action of mutual value to industry and to education.

Chapter III

Competency/Performance-based Personnel Development

PROGRESS AND PROMISE FOR IN-SERVICE PERFORMANCE-BASED PERSONNEL DEVELOPMENT

by James W. Becket*

"Progress and Promise for In-service Performance-Based Personnel Development." Another title for this presentation might be "A Lover's Quarrel with Performance-Based Teacher Education." I'm indebted for that title to Rev. Dwayne L. Proett of the Davis Community Church. Rev. Proett preached on the topic of "A Lover's Quarrel with the World" on the Sunday I was finally putting the pieces of this talk together. It occurred to me that what he was saying about his feelings toward the world were the same types of feelings I have about performance-based teacher education.

Frankly, those feelings were getting in my way as I tried to put this talk together, because as I sorted through the notes I had jotted down previously and the other materials I had on hand, I discovered things were coming up negative. That bothered me, because I do believe PBTE has great promise for us, so I was not anxious to preach a negative sermon.

The general theme of Rev. Proett's sermon that day, however, was that the world needed changing—he wanted to see it change. But because he loved the world, he had some reservations about how that change should take place. He said, for example, that the radical element in our society was not the group to do it because they came at the problem from a perspective of hate, cynicism, and/or contempt, with no respect for history, tradition, or past achievements. On the other hand, he clearly realized no change could ever come if the status quo seekers, complacent in their limited perspective of history and the future, were in control. He was looking for those who were angry with the world. but seeking change from the perspective of love.

Lest I lose everyone at the outset by being totally off the topic at hand, let me draw some bridges. First, I am totally prejudiced about the importance of personnel development. I believe it is the most important function we perform. I have been involved in personnel development in some form or other for most of my professional career. As a high school teacher, only my first two years were spent without a student, or practice teacher, working with me. This led to doctoral work in teacher education, employment at the University of California at Davis in a department educating teachers of agriculture and home economics, and now four years of coordinating personnel development for Vocational Education in the California Department of Education. I have recently taken on some additional responsibilities, and if they take me too far away from professional development, I'll probably go back. I think the love for teacher education is clearly established.

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Secondly, I want to establish from the beginning that I see great promise for PBTE. However, I see some aspects of it which bother me, hence the appropriateness of the concept of a lover's quarrel.

Third, I think it is my task today to go beyond a mere summary of "where we're at" relative to PBTE. There are some excellent summaries around. Probably the most often quoted is Stanley Elam's for the Committee on Performance-Based Teacher Education of the American Association of Colleges for Teacher Education (AACTE).[1] Another which is more recent was presented by Sumpter Brooks at a Home Economics Workshop on PBTE in Los Angeles in June 1974.[2]

Nor will I present you with an extensive bibliography on the topic—any good graduate student can do a better job of that than I can. I see my job today as a practitioner, giving you my views on progress and promise—a lover's quarrel, if you will—with performance-based personnel development.

At the outset, the terminology issue must be clarified. I use the terms Performance-Based (PBTE) and Competency-Based (CBTE) Teacher Education interchangeably. I realize that is not acceptable in some circles. For some, CBTE is a more comprehensive term. That may be true, but it's not worth getting hung up on in my opinion. In defining PBTE, Elam states: ". . . in performance-based programs performance goals are specified, and agreed to, in rigorous detail in advance of instruction. The student must either be able to demonstrate his ability to promote desirable learning or exhibit behaviors known to promote it. He is held accountable, not for passing grades, but for attaining a given level of competency in performing the essential tasks of teaching. . . ."[3] (underline MINE).

On the other hand, a booklet put out by the American Home Economics Association titled "Competency-Based Professional Education in Home Economics" defines competency as "an attitude, behavior, skill, or understanding demonstrated by a participant at a specified performance level."[4] (underline added). In these two definitions, performance is defined in terms of level of competency, while competence is defined in terms of a performance level. Is there a difference? I believe it is an imposed difference, not a real one, and I choose not to make it.

The other terminology issue has to do with the terms "teacher education" and "personnel development." Again, I am apt to use the terms interchangeably, although there are differences.

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[1]Elam, Stanley, "Performance-Based Teacher Education, What is the State of the Art?," AACTE, December 1971.

[2]Brooks, Sumpter, L., A Speech entitled "Competency-Based Teacher Education: The State of the Art," June 1974, available from the American Home Economics Association, Washington, D.C. 20036

[3]Elam, Stanley, op. cit.

[4]_____, Competency-Based Professional Education in Home Economics, Selected Competencies and Criteria, American Home Economics Association, Washington, D.C. 20036, 1974.

Personnel development is a broader term which includes teacher education, preservice and in-service, as well as professional education for counselors, administrators, teacher educators, and state department personnel. We are concerned with more than teacher education, even when we use the term, in this presentation.

The emphasis in this seminar and this presentation is on in-service rather than preservice. However most of what is written, most of what I have said and will say, is about preservice. On the other hand, most of what has been said can be applied to either. However, the paucity of information about in-service, the emphasis on preservice, points up one of our major limitations relative to teacher education. The emphasis in almost all institutions, and therefore almost all research and development, is on preservice. The assumption has always been, and remains in most instances, that once the students have gone through the preservice preparation program—be it competency-based or gut-feeling based—that they are now teachers and the job of education is done. The degree is earned, the credential is in hand, the teacher is set for life. It is a false assumption and we all know it, but we (myself included) do little about it. Too often those of you in teacher education institutions sit back after your students have left for the field, congratulating yourselves for a job well done, with no thought of participating in the job yet to be done. Too often we at the state department level sit back and wait for your products to arrive, willing to curse you soundly for their deficiencies. We are quite willing to participate in upgrading of technical skills once the graduate has been out awhile, or teach a new technique, or convert a counselor to a vocational counselor, or help administrators learn crisis management, but an in-service program which extends preservice into the first few years of service? I don't have time.

To me, this is the greatest potential CBTE has to offer. If we can really identify the competencies needed by teachers and the level of competence that must be achieved, then it seems to me we can do some sound research into which of those competencies must be demonstrated at what level of proficiency prior to the issuance of the initial credential and which may be left to be achieved through in-service

Let us stop making the false assumption that a graduate of a teacher education institution is a finished product and utilize CBTE to jointly plan a professional preparation program which provides education for teachers preservice through the first few years of teaching. I am aware that what I have been talking about is not a complete unknown. Earlier I mentioned the booklet on CBTE from the American Home Economics Association, and it, for example, divides the topics and competencies into the preprofessional level and the professional level.[5] So the process has started. I urge we keep at it. The specificity of CBTE allows us an opportunity we have not had before.

I just discussed the major promise I see in CBTE. Now for the major fear. Sometimes I feel that we in teacher education forget what we are all about, what we are here to do. Which, of course, is to produce teachers who can effectively produce learning in another group of students. It seems to me John Dewey articulated the concept quite well that learning takes place through the interaction of the learner with the environment. The successful teacher manipulates the environment to facilitate learning. Teachers must be concerned with what they do in relation to its impact on learning—not

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[5] op. cit.

irrespective of learning. Yet sometimes I get the feeling we are forgetting that fact when we get totally wrapped up in the teachers' ability to perform certain tasks. To return to Elam's definition, students have reached the desired level of competence when they either demonstrate their ability to promote desirable learning or exhibit behavior known to promote it. My hope is that we don't stop with those behaviors that we think might promote desirable learning. In addition, we have to be concerned with a range of behavior which may promote learning in some circumstances, but not in others. In other words, not only must our teachers be able to demonstrate their competencies with behaviors known to promote learning, they must know when to use one set of behaviors and when to use others. It may well be that this skill in the selection of the proper behaviors to utilize in given circumstances is one which is most appropriately and efficiently achieved through in-service rather than preservice.

Closely allied to that fear is another. In addition to the fear that we will lose sight of those teacher performances which produce learning with students, I have the fear that we will be too concerned with the performing aspects, rather than the conceptual and attitudinal aspects of teaching. True, I am encouraged by the home economists' definition of competency which speaks of attitudes and understandings as well as behaviors and skills. However, I must admit the competencies I see listed in the booklet do not inspire much confidence in terms of developing teacher attitude; or a sense of moral obligation, which I believe teachers should have. Maybe those aren't very popular concepts anyway, but I must confess I find them quite appealing in this day of what many have termed national moral decay. I am just not interested in a teacher education system which leaves these aspects of teaching to chance. The home economists say we are not going to do that, by their definition of a competency. I hope they are right.

For another problem area—both for preservice and in-service CBTE, let's move to the possibility for obsolescence. If we base our competencies which are to be attained strictly, or even primarily, on what currently goes on in the classroom, how do we progress? We recently held a Vocational Education Staff Meeting in California with the theme of Futurism and Vocational Education. Dr. Ron Barnes of the Center for Applied Behavioral Sciences, the Menninger Foundation, started us off with the fantastic look at the third century. He said many things which probably impact what we are talking about, but the overriding issue is that we cannot be content with the competencies which are the most popular—most prevalent—most widely used—most acceptable—or whatever type of "most" list we finally develop. The point is that the future out there will not be like today, and teachers better be doing different things in the classroom. Teaching which is based solely upon the competencies of the present is not going to be competent in the future. For example, one of the lists of competencies in print has a set of four associated with the taking of a community survey. The traditional contact points for vocational educators are there—Chamber of Commerce, parents, labor-management groups. No mention is made of ethnic minority groups, affirmative action, consumer advocates—groups which are definitely on the scene but to whom we in vocational education have not yet responded wholeheartedly. A teacher going out today, however, must be prepared to communicate with them. An emerging competency which did not make the list—at least, not at the time of publication.

Although not talking about CBTE, another statement of Barnes' may be of interest in this discussion. He was talking about our going through a series of educational transitions. One of those transitions he mentioned was from an emphasis on competence to significance. Again, the context was different, but the terminology brings to mind another quarrel I have with CBTE, at least with

some I see and read about. A danger with CBTE, as with all systems we have been involved with in recent years, as we seek accountability, is the measuring of trivia in order to measure something. This relates back to my first major criticism. The competencies which are significant, if you will, are the ones which relate to the creation of a learning environment and the ones through which students change their behaviors, seek out solutions, grope for answers, are motivated to learn, and strive to achieve. I regret that I find little in the lists I see of competencies which are directly related to the learning process. A lot to do with the development of program, but really very little to do with the conduct of learning.

At the outset, I talked about the major promise I see in PBTE for vocational personnel development. In addition to the reality of providing a basis for a meaningful merger of preservice and in-service, there are other promises. There are many who advocate that PBTE is a reform movement with widespread implications. There are others who do not see the promise. My own negative comments may not sound too encouraging at this point. So let us pause for a moment and look at the least that can happen as we take a run at CBTE. William Drummond recounts in the January 1974 issue of *Educational Leadership* the experience he had of reading some material submitted to him which, while purported to be PBTE, missed the boat completely in that it was merely a repackaging of the same old material. The objectives were clearly drawn from the reworking of the same mid-terms and finals that the professors had been giving for years. Drummond states that even this "had at least two redeeming features: (a) the professors who taught different sections of the same course had had to work together to develop a common set of objectives; and (b) the students enrolling in a course would know at the outset the substance of the materials upon which they would be examined."[6] This then may be the minimum we can expect from PBTE. Even at a level below complete reform, however, I believe we can expect much more. I see extensive lists of competencies being developed which are, in general, quite sound. I have tried to point out some potential weaknesses, but the initial efforts look good. Even if we go no further than to have these lists on hand—drawn as they have been from a variety of inputs—teacher education will be improved if they are utilized. For years, for example, we have watched teachers come to the field with no concept of what an advisory committee is, let alone how to set one up or utilize its input. The listing I have of the Center's Professional Vocational Teacher Education Modules has one module on establishing an advisory committee and another on maintaining one. What I'm really saying is that by having all the competencies listed, we should be less apt to leave something out of the curriculum that should be included, even if we do not reach the ultimate of identifying and measuring the really significant competencies. If the list is complete, teacher education will be improved. In addition, the lists give those of us with in-service responsibility the opportunity to do a more adequate job of building on what has been done in preservice, even if the continuous process concept I discussed earlier fails to materialize. The availability of modules designed to develop certain competencies will allow us to improve the performance of new teachers early in their career.

In closing, I would like to make one last point—maybe it is even a plea. In defining terms earlier in this talk, I failed to comment on one word in the CBTE or PBTE initials—that is the B, or Based. In actuality, I do not think any single system or approach is adequate for the professional development programs I think we are capable of delivering. The term, however, is Competency Based and even if we do not reach the ultimate of having competencies really mean "attitudes and understandings," as well as behaviors and skills, reform is possible, and progress is assured.

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[6]Drummond, William H., Editorial: "Does PBTE Mean Reform" in *Educational Leadership*, January 1974.

DESIGNING PERFORMANCE-BASED PROFESSIONAL TEACHER EDUCATION PROGRAMS TO MEET IN-SERVICE NEEDS OF VOCATIONAL TEACHERS

by James B. Hamilton*

Within the next few minutes I will discuss briefly five topics relative to designing performance-based professional teacher education programs to meet in-service needs of vocational teachers. These topics are: (1) The In-Service Clientele, (2) Performance-Based Teacher Education, (3) CVE's Performance-Based Curricula, (4) The Temple In-Service Model, and (5) Some Implementation Considerations.

The In-Service Clientele

Let us first focus our attention upon the people for whom vocational teacher in-service education programs are planned—namely vocational teachers. We are all aware that vocational teachers come in a variety of sizes and shapes and with a variety of needs for in-service education. For the purpose of examining the in-service needs of vocational teachers, we can identify four groups or categories of teachers whose general teacher preparation and in-service needs will be somewhat similar.

The first group consists of the new vocational teachers entering the teaching profession from industry. They are occupationally qualified, but lack teaching experience and have very limited professional teacher preparation. These teachers are seeking initial certification, they need frequent assistance and supervision in planning and carrying out the instructional program for the classroom and laboratory. They are, however, in the real world of teaching.

The second group consists of the new teachers who have completed a teacher education program and are certified. However, they have limited teaching experience, need further development of a basic core of teaching skills and need additional teacher competencies that there just wasn't time to develop in the preservice program. They want their in-service education program to contribute toward meeting the requirements for recertification. These teachers are also on the job in the real world of teaching.

In the third group are the experienced vocational teachers with identifiable professional development needs. These needs are sometimes recognized by the teachers themselves, and in some cases unrecognized. Their teaching skills may need to be improved or upgraded by obtaining new teaching techniques and new technical competencies in their field. These teachers are also teaching in the

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real world and in some cases will be concerned about renewing their certification or seeking permanent certification.

We often find little attention given to meeting the in-service education needs of the fourth group of teachers: the post-secondary vocational and technical education teachers. These teachers are generally technically competent but their certification requirements are often minimal, especially with regard to pedagogical requirements. There is often a wide range of teaching competence displayed by these individuals due to the varied backgrounds they bring to the teaching setting. Some have been highly successful teachers at the secondary level and have been recruited to post-secondary teaching. Others have come directly from industry to the classroom, while others have entered teaching upon completion of technical preparation programs. Many of these teachers have had little preparation for planning and conducting educational programs. They too, however, are in the real world of teaching.

Although the characteristics of each of these four groups of teachers differ considerably, there are some commonalities which have implications for the design of in-service professional education programs to meet their needs. They all need assistance in the development of professional teacher competencies. Although a great deal of variation exists in the number of competencies and the level of competence possessed by the individual teachers, they need assistance in identifying needed competencies and in prioritizing those competencies—they need individually designed programs of in-service teacher education. Since all are on-the-job teaching in the real world—their needs are real and now. The very fact that these teachers are on the job and have immediate needs also affords excellent learning opportunities. All of these in-service teachers have the opportunity to study, to plan, to practice, to demonstrate, to evaluate, and to have their performance evaluated in the actual classroom and laboratory setting with real live students. The in-service teachers need recognition for progress made in developing teacher competence—recognition in terms of certification or recertification, improved position on the salary schedule, or meeting academic degree requirements.

PBTE

In spite of the varied and diverse nature of the in-service education needs of vocational teachers, the Competency or Performance-Based Teacher Education concepts hold much promise as a means of structuring programs tailored to meet this diversity of needs. An examination of the characteristics of Performance-Based Teacher Education is a first step in determining its potential as a viable approach to meet in-service needs of vocational teachers. An AACTE publication (Elam, 1971) specifies certain elements that are considered generic to any program that may be defined as being performance-based by the AACTE committee on Performance-Based Teacher Education. The five elements that appear to distinguish PBTE from other programs are that the:

1. Competencies (knowledge, skills, behaviors) to be demonstrated by the student are:

   a. derived from explicit conceptions of teacher roles,

   b. stated so as to make possible assessment of a student's behavior in relation to specific competencies, and

c. made public in advance.

2. Criteria to be employed in assessing competencies are:

   a. based upon and in harmony with, specified competencies,

   b. explicit in stating expected levels of mastery under specified conditions, and

   c. made public in advance.

3. Assessment of the student's competency:

   a. uses his/her performance as the primary source of evidence,

   b. takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behavior, and

   c. strives for objectivity.

4. The student's rate of progress through the program is determined by demonstrated competency rather than by time or course completion.

5. The instructional program is intended to facilitate the development and evaluation of the student's achievement of competencies specified.

Several additional elements are related and desirable characteristics of PBTE programs. These include: (1) the instruction is individualized and personalized; (2) the learning experience of the individual is guided by feedback; (3) the program as a whole is systematic; (4) the emphasis is on exit, not on entrance requirements; (5) the instruction is modularized; (6) the student is held accountable for performance. Although these elements are implied aspects of PBTE, many have been associated with sound instructional practice for some time.

CVE Performance-Based Curricula

The Center for Vocational Education (CVE) chose to use these elements as guidelines in the development of performance-based vocational teacher education curricular materials. One hundred and eighteen performance-based vocational teacher education modules have been developed by CVE in cooperation with the University of Missouri-Columbia and Oregon State University and their respective state departments of vocational education.

Development of the modules was based on the 384 vocational teacher professional performance elements identified through prior Center research conducted by Cotrell, 1972. The modules are designed for use in both preservice and in-service vocational teacher education programs in all of the various vocational service areas. The 118 modules have undergone preliminary testing with a minimum of ten teacher trainees at one or more test sites and are currently undergoing revision based upon feedback from both students and faculty who used the modules.

Several features of these performance-based curricular materials enhance their potential for use in designing programs especially suited to meeting the wide variety of in-service needs among vocational teachers. The instructional mode of the learning experiences allows either individual or group instruction to be used. Objectives of the module focus on one or more competencies verified as important for successful vocational teachers. Each module culminates with an evaluation of the teacher demonstrating the specified competence in an actual teaching situation. Modularized curricular materials provides the flexibility necessary to tailor in-service programs because one is able to select only those modules appropriate to meet the specific needs of individual teachers. Also there is an opportunity to enhance the learning experiences by incorporating "situation specific" local materials in the modules.

Preliminary formative testing of the modules bears out their appropriateness for in-service vocational teachers; over half of the teacher trainees at the Missouri and Oregon sites who successfully completed the modules were in-service teachers, while the module testing carried out at Temple University was conducted entirely with in-service vocational teachers. Data from a recent market survey completed by The Center indicates that among potential users, approximately the same number planned to use the modules for in-service purposes as did for preservice purposes.

Summative data regarding module use in in-service vocational teacher education programs is limited at this time. Some experience and success has been achieved by one institution through an in-service program designed specifically for new vocational teachers recruited into the teaching ranks from industry.

The Temple In-Service Model

In addition to testing opportunities at the Missouri and Oregon sites, it was desired to locate an off-campus setting where modules especially appropriate for in-service use could be tested. Temple University, with the endorsement of the Pennsylvania Department of Education, Bureau of Vocational Education, entered into an agreement with The Center for Vocational Education to test modules in just such an off-campus situation. They described their needs as follows:

> The traditional in-service vocational teacher education program at Temple requires in-service teachers to obtain their professional preparation by attending classes at one of our several centers. When an intern teacher has successfully completed a number of courses, he or she is granted a provisional teaching certificate. The provisional certificate can be made permanent upon the successful completion of additional course work and three years of teaching on the provisional certificate. We have found very little evidence to support the conclusion that our traditional program is influencing greatly the teaching behavior of our in-service teachers. We feel that the primary reason for this is that the application stage in the learning process is being largely neglected since the mode of instruction is most often that of lecture and discussion (Adamsky, 1974).

Under the leadership of Dr. Calvin Cotrell, chairman of the Department of Vocational Teacher Education, a program was designed, pilot tested, and implemented specifically to enable vocational teachers entering teaching from industry to develop the professional competencies needed to teach

vocational students. Thirty modules covering eighty-nine of the previously identified 384 vocational teacher performance elements were selected as the basis for provisional certification for these teachers. Dr. Richard Adamsky is coordinator of this in-service program. VITAL, the title of the program stands for Vocational Intern Teaching which is Applied Learning.

It was desired that the Temple program be characterized by the following concepts: field-based teacher education, competency-based teacher education, criterion referenced evaluation, individualized learning, self-pacing, self-evaluation, and differentiated staffing (Adamsky, 1974).

Performance-based modules lend themselves very well to several of these concepts. It must be recognized, however, that the use of performance-based teacher education modules does not necessarily make a performance-based teacher education program. It is necessary that these concepts be operationalized in concert to provide an effective program. In the Temple In-Service Model, the differentiated staffing concept was a key to realization of several of the other concepts. Since staffing plays an important role in implementing any performance-based teacher education program, let's briefly look at the differentiated staffing pattern employed in the Temple In-Service Model. The basic staffing pattern used in the Temple In-Service Model provides for five levels of staffing which are identified as: interns, resident resource persons, field resource persons, the senior teacher educator, and the council of educators.

The interns are considered members of the staff because they are ultimately responsible for their own learning: they set their own learning pace and engage in self-evaluation.

The resident resource persons are master teachers in the schools in which interns are teaching. Each resident resource person works with two interns. As the name implies, the resident resource person acts as a resource to the intern teachers by helping them analyze their own needs, selecting appropriate instructional modules and learning experiences, and providing feedback on their performance.

The field resource persons are employees of the university, each of whom works with as many as four local education institutions with a total of from twelve to fifteen intern teachers. Each field resource person works closely with the senior teacher educators and performs a function very much like that of the resident resource person. The field resource person has the additional responsibility of collecting evidences of the competencies developed by each intern and presenting this evidence to his or her senior teacher educator.

The senior teacher educator coordinates the efforts of his resource persons in developing the teaching competency of his interns. This frequently involves reviewing the interns' competency development with the resource persons and assisting the resource persons in the development of their own supervisory skills. The senior teacher educator assumes major responsibility for maintenance of cooperative relationships between the university and the local institutions in which his interns are teaching.

A Council of Educators, composed of representatives of administration, teacher education and competent teachers, evaluates each intern's competency when a certification decision is to be made about the intern. Evidence of the intern's competency is presented to the council by the senior teacher educator on behalf of the intern. The council will then recommend that the intern be

provisionally certified, or may decide that additional competencies should be developed prior to certification.

I have taken the time to describe the staffing pattern and to outline the function at each level because of the unique role played by each in operationalizing a truly performance-based program.

Some Implementation Considerations

The very brief and partial description of one operational model may serve to point up some considerations which seem appropriate in designing and implementing in-service programs to meet the professional teacher education needs of any of the groups of vocational teachers identified earlier in this paper. The considerations I am about to discuss have been presented previously in some detail (Finch and Hamilton, 1974), therefore will be reviewed briefly here as they must be dealt with as in-service programs are implemented. They include:

Identifying teacher competencies — we in vocational teacher education have a rather comprehensive performance base represented by the 384 performance elements. These should be periodically validated and updated however.

Establishing priorities for competencies — whether the planning is for a preservice or an in-service program, initial focus should be upon those competencies which the faculty judges will be most essential to initial teacher success. It is desirable that planning for articulated preservice and in-service vocational teacher education programs occur simultaneously with the in-service program being a carefully planned extension of the preservice program.

Developing/obtaining instructional materials — the performance-based curricula program of CVE with the cooperation of Oregon State University, University of Missouri-Columbia and Temple University will make it possible to obtain an array of modules specifically designed for vocational teacher education.

Orienting faculty members and students — an orientation to Modularized Instruction Handbook is under development by CVE to assist both faculty and students in dealing with their changing roles. "With the establishment of a PBTE program, the faculty member becomes involved in facilitating, managing, and evaluating module learning experiences and serving as a student resource. The student (preservice and in-service teacher) becomes more responsible to himself since he may proceed at his own rate and must focus on mastery instead of grades" (Finch and Hamilton, 1974).

Establishing liaison with various groups — successful implementation of PBTE programs requires careful liaison with all persons participating in the program and with those whose traditional role may be affected by the program. Local education agencies, state education agencies, and teacher organizations are examples of groups that must be kept informed.

Providing resources for students — a resource center is often a central hub of activity for on-campus performance-based programs. Field-centered in-service programs must also

provide for teacher access to needed audiovisual materials and equipment associated with module use.

Developing and implementing a student record system — a system which will serve the unique needs of your program and institution may need to differ radically from a traditional student record system.

Justifying costs — it may be necessary to justify costs which may differ from those of a traditional program.

In conclusion, as we consider strategies for meeting in-service needs of vocational teachers we ould recognize that:

The needs of in-service vocational teachers relative to the development of professional teacher competencies are very diverse.

Competency-based teacher education concepts and program characteristics are especially suited to the design of individualized programs to meet in-service professional needs of vocational teachers.

Individualized curricular materials in the form of modules are an essential ingredient in implementing performance-based in-service programs for vocational teachers.

Successful in-service vocational teacher education programs have been conducted utilizing Professional Vocational Teacher Education Modules.

In implementing any performance-based program strategies must be developed to deal with each one of a common group of concerns.

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DEVELOPING A COMPETENCY-BASED IN-SERVICE PROGRAM IN AGRICULTURE

by Arthur L. Berkey*

It is a pleasure to be attending this seminar and to share progress on the development of our CBTE in-service program in agriculture with you. You should be aware, however, as the title of this presentation indicates, that our program is in the development stage. There are a number of questions for which we lack answers and many problems for which we will need to find solutions.

In fact, as we move toward CBTE in in-service as well as preservice, I often feel like the airplane passenger in flight when the plane captain's voice came over the intercom, "I have some good news and some bad news—first the good news. We are flying at our normal altitude of 10,000 feet and speed of 600 mph. Now the bad news—we are lost!" In contrast, our CBTE program development seems to be moving at 10 mph rather than the necessary 600 with some uncertainty about where we will end up.

My presentation today will be organized in three parts; first, a description of the milieu in which our CBTE in-service program is being developed. Second, a description of our research and development efforts to date. And finally, I will share with you our plans and the major challenges and problems that have evolved from our R & D efforts in CBTE. Some of these challenges and problems will be unique to our particular situation while others will be common to most CBTE program efforts.

Moving to part one, the New York State Board of Regents has mandated that all teacher education in New York State shall be competency-based. Occupational teacher education programs, of which agriculture is a part, must have operational CBTE programs by 1979. Teacher education in general education areas must begin on a CBTE basis by 1975. From the information provided in the new regulations to date, both pedagogical and technical aspects of occupational teacher education are to be competency-based.

Thus, in New York, our emphasis has necessarily been on "how" CBTE rather than "if" CBTE since the latter is not an option open to us. Also, it should be noted here that the State Education Department plans to provide no additional funds for development or operation of CBTE programs.

At Cornell our preservice program is in agriculture. However, our pedagogical in-service program has had a broader focus to include other occupational teachers. This would not surprise those of you who recognize that agricultural education includes teachers of conservation, ornamental horticulture, agribusiness, and agricultural mechanization, as well as production agriculture. The in-service pedagogical needs of agricultural mechanization teachers, for example, who are training students to work

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as mechanics in farm machinery dealerships are very similar to the needs of automotive technology teachers. In fact, the Drake/Ely study of the in-service needs of occupational teachers in New York—which I will describe later, showed more similarities than differences in the pedagogical competencies needed by occupational teachers.

Our technical in-service efforts are necessarily limited to agriculture as subject areas other than home economics are not offered in our institution and home economics has its own teacher education program.

Agricultural education at Cornell is the only undergraduate teacher education program in the Department of Education which is one of eighteen departments in the College of Agriculture and Life Sciences. So you can see we could well be described as a small frog in a large pond. Our modest size has a positive effect in getting staff consensus but may prove a disadvantage in marshalling the necessary resources for a research and development effort at CBTE.

New York State was a participant in the multistate consortium on CBTE sponsored by AACTE and has had a group of CBTE pilot programs supported in part by the New York State Education Department funding. To date, only very limited information generalizeable to research and development in CBTE has come from these programs. Hopefully more will be forthcoming in the near future.

Unfortunately, in my opinion, New York State has elected not to participate in the National Occupational Competency Testing Institute. This is an area where we will need considerable support as I question if testing for technical competencies, particularly on a continuing basis, will be feasible on other than a regional basis.

Focusing on agricultural education in particular, the in-service needs of teachers of agriculture in New York are varied and extensive. The continuing state and national shortage of agriculture teachers, combined with the rapid expansion of occupational education programs for off-farm agricultural occupations, has necessitated employment of a number of non-certified teachers. Other states face similar situations in the critical need for in-service education for teachers of agriculture.

Finally, let me share with you some general conditions and guidelines for CBTE in New York State which are included in the Regents' mandate. Each institution will propose competencies and assessment procedures and criteria for these competencies. Governance for CBTE shall be by a consortium of representatives of the university, school district administrators, and professional staff with the latter to represent the professional staff teacher association. The program is to be field based which essentially means that a greater proportion of teacher education activities will take place in the public schools.

Let me move now to the second part of this presentation which is CBTE program development efforts. Work began with a research effort to identify in-service needs. The effort was by William Drake and Ron Ely entitled, "Performance-Based Professional Education In-Service Needs of Secondary Level Occupational Teachers in New York State." The study involved teachers from the six occupational areas of agriculture, business education, distributive education, health education, home economics, and trade and industrial. The teachers responded in two modes regarding their in-service pedagogical needs. First, in terms of "need" by a successful teacher in their area, and second their own perceived performance level. The 384 professional performance elements to which the teachers

responded in these two modes were essentially those identified by Cotrell and others in the study at The Center for Vocational Education. Also, the Cotrell descending classification of performance and cluster elements was used. An example would be the area of "execution of instruction," the cluster "utilizing visual aids," and the performance element, "present information with the chalkboard."

Response in the Drake/Ely study was by performance element for need, and by cluster for personal performance level. The level of instruments returned was over 80 percent.

Efforts to verify the teachers' perceived level of performance by supervisors' ratings resulted in a wide variation between teacher and supervisor ratings. Observation of teachers by supervisors was reported to be limited to several times per year which may account for some of the differences.

The data was analyzed and, using weighted means, clusters were plotted on an importance/performance level paradigm of in-service needs. Clusters with high importance and low performance had highest in-service needs. Conversely, where clusters were rated low in importance and high in performance, this indicated the lowest need for in-service.

As might be predicted, the in-service need for clusters within areas varied both between and within the six types of teachers. However, of the fifty-seven clusters in the ten areas, responses by the different types of teachers differed at the .05 significance level in only fifteen clusters. Thus the forty-two clusters upon which the teachers were in agreement were judged to be "core" clusters for in-service education.

The next obvious question is how the results of the study can be used in an in-service program. At Cornell the main thrust of our in-service program has been during the summer when one and three week unit courses in both pedagogy and technical areas are offered for academic credit. Funding by the New York State Education Department Bureau of In-Service Education has included partial tuition—with the college waiving the balance, and a living stipend where courses are approved under State Plan priorities. Planning for the pedagogy courses this past summer were based on the core competencies. Individual teachers can identify their specific needs through use of a checklist derived from the instrument used in the Drake/Ely study*.

One and two day workshops for beginning teachers are conducted during the year. Planning for these activities has been based on the core competencies similar to the summer course offering.

Of course, the optimal in-service CBTE program is one in which teachers can identify their in-service needs for specific competencies based on assessment and then have readily available an educational program to provide learning experiences to develop the needed competencies.

In the technical competency areas, we have much additional work to do before a comprehensive listing of priority technical competencies for teachers is identified. However, work in this area is progressing and this information will be a necessary component for a CBTE program in agriculture.

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*A summary of the Drake/Ely study on the in-service needs of occupational teachers in New York State is available at $2 each from L. Wicks. Instructional Materials Service, Stone Hall, Cornell University, Ithaca, New York 14853.

Moving to the final section of my presentation—that of plans, questions, and challenges, I will begin with our plan for CBTE program development which is in four phases. The first phase is planning and design which involves collection of information on CBTE, generation of a development plan, and formulation of a program description. Also included here are orientation of the governing consortium and assessment of the current program to determine which elements, if any, to retain.

Phase two, initial development, consists of developing the components for an instructional system, a management system, and a research system. Prototype testing is the third phase which includes in-service on CBTE for relevant personnel, assessment of the newly developed instructional and management systems, redesign of these systems as needed, and writing of a complete program description.

The fourth phase, initial operation, involves orientation of cooperating personnel to CBTE, preparation of personnel to implement the program, and beginning initial operation of the CBTE program.

One way to look at the tasks for carrying out the four phases above is to examine the research questions and challenges involved. What should be the form and content of the competencies list? And how can competencies be translated into instructional plans? What should be the role and membership of the governing consortium? What should be the form of the management system components? What new staff competencies will be needed? Should competencies be designated in some order of priority, and if so, on what basis? How will a comprehensive listing of technical competencies needed by teachers be identified and kept up-to-date?

Another important area is the translation of performance elements into measurable (criterion referenced) instructional objectives. The CVE performance-based professional education modules have already filled this need in the pedagogical area. We will need the help of employers and other technical experts to accomplish this transformation in the technical areas.

It now appears that we will be using the CVE performance-based modules with some modifications. The individualized instruction mode may be modified—due to to time constraints, and some references may be replaced with materials that apply more specifically to agriculture.

Other challenges include the additional time and resources necessary for testing of individuals. Further, there is a question of the effect of technical competency on assessment of pedagogical competency. For example, would a welding demonstration ever be pedagogically sound if the technical information and/or procedures presented in the demonstration were incorrect? At some point, pedagogical and technical competencies articulate. What is this point and how can it be accounted for in valid competency assessment?

Other challenges involve convincing staff outside of education to reorganize their courses to incorporate content and formalized assessment for specific technical competencies, particularly where the students in agricultural education are a minority in a class.

There is also the question of increased compensation to local schools for their expanded role in a field centered CBTE in-service program. This may prove to me more a problem for preservice than in-service.

Further, there is the matter of the affective—that is, attitudes and values, area in CBTE. Even assuming, which I am not yet willing to do, that most attitudes and values can be quantified, how can

these be taught and assessed? In in-service there is little opportunity for selection if indeed one takes the position that some attitudes and/or values should be present as a condition of selection for teaching. The research to date provides limited information at best in the affective area.

Finally, there is the question of the criteria for an acceptable level of success for CBTE programs. And, to what extent can, and should, product evaluation in terms of learning by pupils taught by teachers in preparation be used?

In summary I have shared with you the milieu in which our CBTE in-service program is developing, described our research and development efforts to date, as well as future plans and some challenges and questions that will need to be resolved.

Hopefully, by the time the deadline for CBTE in New York has arrived, we will, through the shared efforts of the several parties involved, and through use of curriculum materials such as the CVE performance-based modules, develop a CBTE program that will be one viable route for teacher education in agriculture. Notice I didn't say the "best" or "only" way.

In New York State, mandated CBTE is sometimes described by the titles of Shakesperian plays. May "A Midsummer Night's Dream" and "Tempest" change to "As You Like It." Thank you.

COMPETENCY-BASED PERSONNEL CERTIFICATION STANDARDS AND IN-SERVICE EDUCATION

by L. O. Andrews*

Competency-Based Teacher Education (CBTE) and Certification is a movement whose time has come, and this writer is convinced we are going down this road whether we like it or not. Seldom has one of the "in ideas" in education—and they seem to appear with an ever greater frequency—stirred up a greater storm of controversy than this one. Few of us here would probably espouse either the extreme pro or con position. Hopefully none would consider CBTE the panacea for all the ills in teacher education, which some of its advocates have appeared to do in getting mandated laws and regulations requiring CBTE curricula and certification at some proximate future date. What innovation need worry about its opposition when its friends have taken such untenable positions?

After two or three more future waves of new "isms" in education come along, three major results may remain as permanent gains from all the effort expended on CBTE. They are: (1) successful patterns for improved teaching and learning of professional subjects, (2) a much greater emphasis on carefully identified objectives for professional teacher education, and (3) improved criteria and procedures for assessing teacher competence.

Interestingly enough, the fields of vocational and technical education and the so-called "practical arts" subjects have several natural advantages which lend themselves to this movement. Objectives in these disciplines tend to be more concrete, more proximate and the results of instruction and learning more measurable than is true in many of the so-called traditional academic disciplines.

Rationale for CBTE

One of the current pressures upon education, as well as upon several other aspects of our society, is for accountability. Just as in our materialistic society, economic upheaval, and the rising variety of shortages of many kinds are increasing the demands for greater productivity; so in teaching the public is concerned that teachers increase their productivity. As both school taxes and teachers' salaries rise so does the press for greater product from the public's school tax dollars. One of the evidences of this is the public's growing irritation with teachers and increased numbers of damage suits, so that teacher malpractice is an ever greater concern leading to a common pattern of professional insurance against damage claims.

Professional teacher education curricula and first local and now state certification as a means of of insuring a competent instructor in each classroom have had a very distressing track record indeed.

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Unfortunately, the few research studies to secure evidence on this point are not much better advocate of the success of teacher education than the wave of criticism of the last decade. A few of us have been crying loudly in the wilderness for some years that teacher educators should wake up and realize that teacher education is five minutes to midnight unless the process begins to turn out a product that "can do." We need a group of professionals who can be recognized by pupils, parents, and the general public as distinctly more competent than equally intelligent persons (but untrained professionally), or bachelors degree graduates without professional training and certification.

In the academic fields the evidence shows that teachers without professional preparation and certification are very hard to distinguish from certified ones. In those special fields where a particular specific competence is expected, such as in the arts, physical education, and the practical arts, those who are themselves competent in a given field are able to distinguish those who do not have these skills. In a very few fields, such as the teaching of the deaf, persons possessing both knowledge and professional skill are easy to spot as against those who are untrained. So, too, with occupational competency for the vocational fields, those working in the specialty can usually recognize the specialized competency or lack of it.

However, in the strictly vocational and technical fields, the competence of one's graduates is very quickly put to the test on the job. Whether employers come back for more graduates for their employ can become a significant criterion of the success or failure of the entire curriculum in a given field.

The credibility gap in teacher education is so bad, this writer would have to take the position that teacher educators need to follow some such program as this:

1. Combine the best theory, research results, and practice into a comprehensive rationale.

2. Based on this rationale, develop necessary processes and proceed to use them.

3. Develop realistic but comprehensive criteria for assessment.

4. Constantly gather feedback for formative evaluation.

5. Gather evaluative data to judge the effectiveness of the total preparation process.

6. Whenever any major segment of a program can be demonstrated as reasonably effective, then and only then, make it official as a requirement or regulation—either at the institutional or state level.

Teacher education and certification must demonstrate that they really do make a difference!

In summary then, it is not hard to come up with numerous reasons why a system of CBTE and CB Certification Standards ought to be developed and made effective, plus a plan for monitoring professional competence through a program of in-service education and assessment.

Characterizing my reaction to CB Certification and Recertification I'd be tempted to react this way, "CB Certification—Yes-s-s; maybe. But later, later; much, much later! Teacher educators and officials at all levels of education have got to stop kidding themselves, and build on demonstrated effectiveness, instead of on 'pie in the sky' hopes!"

Trends and Issues

As other speakers in this seminar have reported in depth, lists of teaching competencies have been developed, many instructional modules are already prepared and are being tried out. Various institutions have moved to CBTE programs on a pilot and now sometimes on a comprehensive basis. Feasibility and effectiveness data are piling up.

But despite the apparent success of numerous programs, not all are rosy and without blemish. Even a cursory examination of some programs and their basic materials make it evident that in some cases old wine is being put into very fragile new wineskins. One book, for instance, is little more than a poor example of a professional course workbook of the 1930's with a CBTE title! Many students have been turned on by the individual learning approach and the opportunity to move at one's own speed; while a large minority usually are turned off by this pattern of instructional organization. Rigid, comprehensive CBTE instructional procedures are not for everybody! Such instruction must be adapted to individual learning styles.

Perhaps the most serious limitation, which directly relates to certification, is the fact that one looks hard and long to find significant emphasis on ways to help the individual integrate within himself all these discrete modules of professional competence. Most of us react with some horror at the practice of having students keep an account book, and when each of the hundreds of modules have been checked off as having been achieved at an acceptable level of quality, the cash register grinds out a certificate and kicks out the finished professional! What evidence is there that the whole really is equal to the sum of all its parts? Precious little, although some publications are appearing which are being addressed to this problem of helping prospective teachers make this personal, professional integration.

But the really critical aspect of CBTE and CB certification is the assessment phase, about which far too little has been done to this point. Writing as the chairman of the AACTE Task Force in this area, David Krathwohl observes, "Until and unless some real progress is made on resolving the problems of instrumentation and measurement, CBTE will go down in the history books as one more bandwagon in the long line of oversimplistic solutions for complex problems." Either legislating CBTE curricular innovations or CB certification ahead of known and tested supporting processes is hardly any way to make "brownie points" within the profession or with the public.

Another issue complicates the entire picture—that is, whether teachers should be prepared just as good teachers of their special field, or whether they should have special competence to teach in certain types of communities, or special school organizational patterns, special added skills for particular types of instruction, the teaching of reading, understanding problems of civil rights, analysis of their own teaching performance, and on and on. Every projection of a new approach to teacher education lists new expectations for teachers to meet, which patently cannot be provided in the outmoded bachelors degree straight-jacket. Somehow the profession should finally decide whether teachers should be given good general preparation to teach their own field before certification or expected to be specialists in almost everything. Perhaps, as with industries in some vocational fields, prospective teachers should achieve general teaching competence, and then the school system should be expected to provide the various types of special skills and understandings needed to teach in the assigned situation in that system. Clearly this is an issue directly related to certification, recertification, and in-service teacher education.

Strategies for Improvement

State regulations and college actions should not require faculties under forced draft to identify their objectives, develop new modules for learning and suddenly expect to put their total curriculum into this new mold for all students all at once. Even at the University of Houston where very intensive and extensive preliminary work had been done, moving from a very successful pilot operation to one for all their prospective teachers, developed many very difficult problems.

All evaluation is based at some point or other upon someone's subjective judgment—even if it is only whether "my recall of this item is the right recall." And in the field of human behavior, evaluation becomes largely a matter of refining criteria, refining processes, gathering evidence, and having it interpreted—each of the processes being done by experienced professionals specifically trained for this particular professional task. As Combs says, we must stop avoiding the effort to obtain assessment evidence in those areas in which it is difficult to obtain, while only gathering data in ways in which it can be most easily obtained, and thereby assuaging our professional consciences thinking it is more "objective."

Despite their infrequency, there are several research studies that show that long-time experienced professionals, given time and resources, can develop sound criteria and can learn a process for applying these criteria which can result in relatively reliable assessment results. The task is one of changing one's perceptions from seeking a simple, easily applied process that will result in some valid and reliable mathematical factor which can be used to weigh competence accurately. No way! We must resist the efforts of the "panacea" boys and girls to kid us into thinking this is either possible or desirable at this time, or perhaps ever.

The present writer makes no claim to special clairvoyance or omniscence in this regard, but he does firmly believe that progress can (and must) be made down this road of assessment. In fact, some progress surely will be made applying the best that is now available, but never making claim to more than can be demonstrated, and never requiring untried and unacceptable procedures for decision-making. Furthermore, we must not ignore the whole professional development question, "Is the mastery of all the techniques really a guarantee of true professional role integration?" Most would answer in the negative; and Combs' study of the helping professions discovered that all teachers, successful and unsuccessful alike, knew what ought to be done and how it ought to be done.

A suggested approach to this process of assessment is to break competency into some major areas which are broader in scope than teaching behaviors. But in moving from the particular to the more general areas one runs into the criticism of the best designed research of the 1960's. A very disturbingly high percentage of the experimental research comparing various methodologies and treatments has resulted in a finding of "no significant difference." Commonly one of the assumed reasons for such findings is that the design of most studies forces measurement of much "too global" end products. One way to compensate for this problem is to increase the number of measures, since experimental designs often limited the data to one or two. Thus, the concept of combining several broad areas of evidence is utilized in the plan proposed here.

The resultant design consists of six primary areas (two sets of three each) and two secondary areas:

Areas from which Evidence of Competency Should be Obtained

OCCUPATIONAL COMPETENCY, & CURRENT ACQUAINTANCE WITH THE FIELD	RELATED TECHNICAL KNOWLEDGE	PROFESSIONAL KNOWLEDGE & UNDERSTANDING
PROCESS OF TEACHING, TEACHING BEHAVIORS	TEACHER PRODUCED CLIMATE FOR LEARNING	PRODUCT OF TEACHING-LEARNING

Desirable Supplemental Areas

OPERATIONAL EFFECTIVENESS	SKILL IN APPRAISAL, & SELF-RENEWAL

The four areas with the underlined words would be the primary targets for the assessment of vocational teachers, while the other four areas should be used for gathering supplemental and corroborating evidences.

Occupational Competence - Considerable work has been done on this area and much more is currently in progress. Part of the problem is establishing currency in this area of competence. Many institutions are designing experiences for building initial competence, and similarly the need exists for such designs for establishing a base for recertification.

Related Technical Knowledge - Many standardized tests exist in this area, but the proliferation of fields and the problem of currency complicate the effort here.

Professional Knowledge and Understanding - Standardized tests in this area have never had very general acceptance, and the results have never correlated very highly with assessed success in teaching. On the other hand, with the great proliferation of newer techniques, procedures, and concepts some differentiation between teachers ready for modern day teaching and those who are not should now be possible.

Process of Teaching, Teaching Behaviors - Competence in this area can be assessed to a degree through selective use of the data from the evaluation of student success in the training modules, and from the evaluation of the teacher's ability to put it "all together" in a practicum or on the job. Weaknesses can be strengthened by procedures that are now very common for increasing specific instructional skills. The research results in this area are not very encouraging. Bruce Joyce concludes that process is not the critical factor.

Product Assessment - The research in this field has been extremely limited, as Peck and Tucker point out in their chapter on "Research on Teacher Education" in the recent *Handbook of Research on Teaching*. As an interesting sidelight it may be noted that emphasis on product from teaching has been a major part of the Job Instructor Training courses in industry and business since the First World War, with slogans, such as, "If the worker hasn't learned, the foreman (supervisor) hasn't taught!"

Specialists in vocational and technical education ought to be leading the profession in developing sound techniques for gathering useful evidence in this aspect of assessment.

Operational Effectiveness - That is, management, organization, liaison functions and placement, are often much more prominent as a part of vocational and technical teaching, than is customary in most other school subjects. While efficiency in this realm may not actually make the difference between students learning and not learning, still efficiency can often have considerable effect on many other people in the school and in the field, as well as giving the teacher more time for more directly instructional tasks.

Appraisal - Particularly self-appraisal, and self-renewal are probably the chief avenues open to the average teacher to enable him to make changes, bring in innovations, and keep up-to-date in his field. The pattern developed by the Far West Educational Laboratory, usually called the mini-course approach, has the process and technological ingredients to assist teachers in studying their own identified problems, to develop and practice solutions which can then be incorporated into their instruction. Perhaps one of the most needed innovations in teacher education is to assist prospective teachers to develop and perfect a pattern for self-renewal which fits their own style, and then encourage beginners to practice the process until they find it natural to use it often. In the future one of the major ingredients of a total assessment process may very well be to get evidence on the ability of teachers to use a self-renewal process, and the frequency with which they do actually use it.

All of the needed "hardware" to support this process has been available for years, and increasing amounts of "software" are steadily becoming available, including the national project to produce and disseminate "protocol" materials—filmed representations of a large number of concepts in education.

Climate for Learning - The remaining area of the eight, may involve the most subjective judgments, but also may be the most crucial in today's schools. A teacher combines his knowledge of many areas, his varied behavioral skills, and his personality to produce a climate for the support of learning. Both experience and research attest to the great influence this climate has on learners, especially in the aspects we speak of as motivation and attitudes. It just could be that as we place more attention on these two aspects of a good learning situation, we could achieve greater recognition of the importance of motivation and attitudes by teachers, learners, and workers.

Mrs. Arlene Silberman traveled with her husband while he was visiting schools prior to his writing, *Crisis in the Classroom*. After four years she concluded that there were three characteristics of a good elementary school. Paraphrased slightly so that they apply to any learning situation they are:

a. A pleasant atmosphere where every student is valued and successful.

b. A faculty concerned with developing young people who delight in learning.

c. Programs that respond to each student's individual needs—his own perceived needs.

Experienced professionals can identify criteria, and after training and experience in the process, can gather much evidence on the "supportive climate for learning." Not one or two haphazard observations, but a carefully designed series by three to five observers. Research shows that various combinations of media and approaches can be used, such as one or at most two on-site observations, one

or two video tape recordings chosen by the subject from a series that have been made at the subject's direction, and three to five audio recordings also chosen by the subject from a much larger series. The evidence gathered by a team from such a series would certainly give a reasonable picture of the type of professional climate a teacher produced. When combined with evidence gathered on the other seven criteria a very comprehensive picture could be drawn of the competence of a given teacher—not just a good or bad report, a pass or non-pass, a certificate granted or renewed or not. This type of professional assessment could serve, at the subject's pleasure, for a number of professional purposes—a portion for use in applying for a position, a basis for a conference initiated by the teacher for assistance with areas of concern, and any of the more traditional uses of assessment.

But someone says, "What about the cost?" No cheap, once over lightly assessment is going to serve the schools, the pupils, the public, or the teacher very adequately! Either assessment is important enough to be done well or else it should not be attempted at all! But this writer believes that true professional assessment is thoroughly possible, and important enough to be developed and carried out at a very high level of professional quality. We may be forced by the pressure for accountability to demonstrate and provide truly adequate assessment. When that happens the funds may very likely be provided, if we have documented both the success of the process and its cost.

Numerous groups have rejected CBTE both for instruction and especially for assessemnt, as well as a basis for certification and recertification. There are alternative ways that this same emphasis can be secured, but they probably will require much greater effort and initiative on the part of teacher groups. As an example, the professional organizations might take over completely the monitoring of their ranks and the mandatory evaluation of competence to continue in the profession. In as large a professional group as the teachers this would be difficult, and would be fraught with dangers.

Another way, which again would require a great deal of initiative and financial support by the teachers, various teaching areas could set up special prestige groups to which persons would have to apply for membership and document their competence before acceptance. This is the process used by subgroups in medicine such as the American College of Surgeons, etc.

The specific process is not the important issue. What is important is that the teaching profession is going to have to find ways to put better qualified beginning teachers in the schools and also develop effective processes to monitor professional competence throughout a person's professional career. Unless these objectives can be achieved to a reasonable degree, professional prestige and public support for the schools may diminish alarmingly.

In-service Education

Many professions and some of the technical areas, which might be spoken of as the highly skilled crafts, are moving rapidly into mandatory procedures for keeping up-to-date in their fields. Some groups have already adopted programs for recertification, while others are working on plans for much tighter control over professional competence of their members. Actually, teaching can be said to be lagging behind several other fields in this regard. The procees is a difficult one, and indeed, expensive if done well, but all signs point to the necessity for moving in this direction. Many of the processes and comments in the preceding section can be adapted to this phase of assessment and maintenance of professional competence.

Here and there around the country one encounters new and imaginative programs of staff development, in-service education and related activities. The evidence suggests that teachers and teachers' organizations are making their needs and preferences known. Many school systems are moving toward very extensive programs entirely on their own. There are several good arguments for combining the forces of the public schools and the universities in this effort, because extensive benefits can accrue to both. Again cost has to be reckoned with as a factor. Some of the most successful programs suggest that the cost should be underwritten in large part by the state with substantial support from school systems and the universities and some cost being absorbed by those who benefit. People tend to take seriously those activities in which they have invested both some of their substance and some of their own time.

Over the last decade numerous voices have been raised in favor of joining preservice and in-service teacher education, and thus making one continuous whole of professional development. A wide variety of different arrangements have been evolving in this same period for operating student teaching and other laboratory experiences for prospective teachers. One of the most innovative changes has been the assumption of some considerable responsibility for in-service teacher education by some of these structures called Teacher Education Centers. Several of the best known of these centers, such as those in Maryland and West Virginia, take as their central purpose teacher education from the earliest preservice to activities for the long-time career professionals. In West Virginia, for example, in their regional Multi-Institutional Teacher Education Centers, with three part financing—state, school system, and colleges—the governing boards and staff become facilitating agencies for a very wide range of in-service activity based on regular and systematic needs assessment.

In the Harrison County Teacher Education Center, located in Clarksburg, West Virginia, a very unique and promising type of graduate program has evolved in the last three years in cooperation with the College of Education at West Virginia University. A senior professor at the university teams up with the director of the center to teach a contract-type course carrying a very broad course title, on location in the county at times and places suitable to the enrollees, who include teachers, school administrators, and central office personnel, and college staff. The class meets about two-thirds as often as the usual graduate course and the campus professor attends only about half of those times thus saving staff time and travel costs. The field instructor approves all contract proposals, counsels with students and carries the bulk of the evaluation responsibility, thus stimulating progressive growth by the enrollees and many cooperative innovations. The pattern seems ideally suited to meeting a wide variety of special needs for field-based, problem-centered graduate courses, and could be adapted to many different purposes in vocational education.

Another interesting and unique development supporting extensive in-service programs are various consortia around the country in which colleges and public schools develop cooperative ventures. Many have been funded by specific grants, which have a way of running out and thus often dissipating the programs relatively quickly. Others have developed various arrangements which provide constant support, both financial and professional. One of the most successful of these is the Wisconsin Improvement Program, a consortium of seventeen public and private teacher education institutions together with many school systems. For the last three years the consortium has carried out an internship program at the undergraduate level for nearly a thousand interns a year. By a wise arrangement for the pay of these interns a small fraction of the allocated compensation is retained by the school system for in-service activities locally, and a similar amount is put into the state consortium fund for other types of in-service and maintenance activities. The variety and the uniquely original and

professional nature of much of this work can be seen from the lists of activities which these funds make possible.

As the total effort in preservice education is reduced by both the declining demand for teachers and the declining enrollment in education curricula, a corresponding increase in a broad range of in-service activities should take place. The needs are great and the prospects are promising for better teachers—teachers who are happier people—as well as for better learning in the schools.

Summary

CBTE and CB Certification and recertification are no panaceas, but the evidence suggests that an intelligent use of these developments and movements has real potential. All professional interests need to understand that the potential for unwise judgments also exists within the movement, and, therefore, the excesses and the wild "pie in the sky" notions should be discarded early. Carefully planned cooperative effort, using the best that we know, constant monitoring of results, and careful documentation of what has been demonstrated as possible may well assist in securing the financial support which a sound program in this area must have to succeed. But the most essential element is to develop very sound processes which can be tried out and demonstrated to successfully accomplish their purpose to the satisfaction of the professional group (teachers) involved, before applying these processes widely, and certainly before requiring all teachers to use such processes.

COMPETENCY/PERFORMANCE BASED CERTIFICATION

The Latest Scientific Management Effluvium?
Or
The Answer for Which We Have Waited?

by J. Alden Vanderpool*

I have been asked to take the "con" position with regard to "Competency/Performance-Bas Personnel Certification Standards and In-Service Education." I don't know exactly why a teache association representative was chosen to take this position. I know that the NEA has taken a dim view of C/PBTE,[1] but state teachers' associations are not yet obligated to agree with the NEA. T California Teachers Association has taken no position as of this date. The matter is under study i the Teacher Education Committee of our statewide policy body, the State Council of Education. I don't know what position the council will take.

The California Teachers Association's history in this arena would indicate that teachers in Ca ornia would not automatically be opposed to the idea—but that leaves much unsaid. The associati adopted one of the earlier versions of competency definitions as its official definition of teacher c petency. After some modifications, CTA adopted the "California Definition" which was develope by Professor Lucien Kinney and a group at Stanford University. The definition is dated, and I dor know whether our council would reaffirm it now.

I am confident that, if punitive applications of C/PBTE are attempted, the association will be opposition. I consider recertification punitive.

One is tempted to say, with regard to Competency/Performance-Based Teacher Education, "S what is new?" People have been talking about morality and virtue for centuries, but morality and virtue are still not universal—even if they could be defined in a way that would meet with universal approval.

In order to be clear about what I mean when I refer to C/PBTE, I'll draw upon a definition th I find useful. Although it is easier to cite the need for the millennium of perfect C/PBTE than to d fine it, I think Phyllis Hamilton has worked out a definition that I can live with.

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*J. Alden Vanderpool, teacher education executive, California Teachers Association.

[1]"Resolved, that the National Education Association demand that all state education departments postpone the implementation of Performance Based Teacher Education programs until valid reliable research indicates that these programs are an improvement over present programs." (Item 2 of New Business adopted by the 1974 NEA Representative Assembly.)

Dr. Phyllis Hamilton, of the Stanford Research Institute, defines it this way:

The competency-based approach can be defined as one which specifies objectives in explicit form and holds prospective teachers accountable for meeting them. Teacher competencies and measures for evaluating them are specified and made known in advance of instruction.

Competency-based programs are criteria referenced and thus provide information as to the degree of competence attained by a particular student teacher, independent of reference to the performance of others. Competencies may be developed and assessed on three types of criteria:

- Knowledge—facts, principles, generalizations, awarenesses, and sensitivities that the student teacher is expected to acquire.
- Performance—behaviors that the student teacher is expected to demonstrate.
- Consequences—outcomes that the student teacher is expected to bring about in the emotional and intellectual growth of his pupils.

Beyond this basic definition, there is confusion even among the disciples of the movement as to what constitutes a CBTE program. Most would agree, though, that a program is competency-based if it possesses the following characteristics:

- Individualized instruction—the student teacher is involved in making instructional choices that he considers relevant to his own interests.
- Instructional modules—a module is a unit of learning consisting of a set of activities intended to help a student teacher achieve specified objectives.
- Time as a variable—completion of modules and rate of progress through the program are determined by the student teacher's competency rather than by the traditional requirement of course completion in a fixed time span.
- Field-centered instruction—because of the emphasis on performance in real settings with pupils, there is more and earlier practice teaching.
- Emphasis on exit rather than entrance—while program admission requirements are less rigid, demonstration of competency is required for certification.[2]

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[2]Phyllis D. Hamilton, *Competency-Based Teacher Education*, Memorandum Report, EPRC 2158-19, Educational Policy Research Center, Stanford Research Institute, Menlo Park, California 90425, 1973.

The scientific management notion brought Bobbitt in 1912 to the forefront with his "General Principles of Management Applied to the Problems of City School Districts." This was followed by Charters and Waples in 1928, by Lucien Kinney's work in 1953, and by the Florida Catalog in 1972 and many others all along the line.[3]

The bandwagon of scientific management has had a new face put on it and a new label tied to it. Its fuel is ballyhoo, its results limited because the fatal flaw remains. It is a scientific management movement without a science—only the trappings of science. It rests only on logical extensions of conjecture and armchair speculation.

The notion is like apple pie and motherhood. Of course, everyone would applaud having more specific outcomes defined for credential programs and to guide in-service education. Everyone would be appreciative if those practices which have the most significant positive consequences for students were identified. Most teachers want to improve their effectiveness.

Teachers will, I suspect, be more than a little reluctant to be shotgunned down another path which has been chosen by somebody else—another path hailed as the rosy road to salvation. They are more than a little skeptical—having been blamed for past failures of proclaimed panaceas dreamed up by true believers (or the feds) who often seem remarkably tardy about adopting the advocated practices in their own shops—including recertification. If the Ph.D. factories realized the potential revenue in recertifying Ph.D.'s as the credential factories have realized the potential in recertification, maybe the Ph.D.'s would be less quick to get on the bandwagon of recertifying public school teachers.

It is easy to take the con position on this issue. The literature is full of dissenting voices.

I call your attention especially to the report of one USOE-sponsored study, done by the Stanford Research Institute, which takes a skeptical tone and raises critical issues. The report was printed in mid-1973. I have attended several USOE-sponsored conferences on C/PBTE since that date, and the document was missing. I didn't even hear it referred to by USOE people. This has raised serious questions in my mind about this bandwagon being fueled by tax money.

I have attended six conferences on C/PBTE, five of them national conferences. It was fascinating to sit in one room one hour and hear the researchers—the best in the nation—tell us that there is no substantial evidence to connect teacher behavior and student achievement and then sit in another room the next hour and listen to the promoters tell about how they were building programs based on connections between teacher behavior and student achievement.

It was almost as if they were saying, "Don't confuse us with the facts, or the lack of them; we've got a good thing going here and we are going to bandwagon it for all it is worth."

From where do the competencies come that make up these lists and catalogs? They come largely from armchair speculation and extrapolation of speculation, from reason, logic, and retrospective analysis of experience. The most serious defect, the fatal flaw, is the "lack of empirical knowledge on

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[3]For an interesting tracing of this bit of history from which this is reported, see ibid.

teacher behavior as it relates to pupil outcomes."[4] Phyllis Hamilton, Barak Rosenshine, and Nathan Gage—and many others—assert this also. They use different words and different degrees of emphasis but transmit the same essential message. They point to the same fatal flaw.

So, these accusations seem to be justified: Competency/Performance-Based Teacher Education—

1. is speculative
2. is conjectural
3. rests largely on unsubstantiated premises, upon hunches, and best guesses
4. grows out of retrospective analysis of experience
5. is grossly over-blown
6. has not yet demonstrated its superiority over other bases for teacher certification
7. is old wine in new bottles
8. must be accepted on faith.

There are difficulties at both ends and all along the way of the assumed continuum, teacher behavior—student achievement. Adequately defining and describing teacher behavior presents very difficult problems—as yet unsurmounted. Demonstrating connections between teacher behavior and student achievement remains to be done, certainly with sufficient surety to say certify—recertify, not certify, nor recertify, on this basis.

There are literally hundreds of instruments used to codify teacher behavior. You are all familiar, no doubt, with the massive compilation of them entitled *Mirrors for Behavior*. Undoubtedly their number has increased exponentially since those volumes were published. No doubt, what Rosenshine and Martin said about the gaggle of such instruments submitted for the AERA 1974 meeting could be applied to most of them; that is, "On the basis of past performance, one can predict that these instruments will be seldom used by anyone except their authors and that the authors will not attempt to validate their instruments against student educational outcomes."[5]

Bob Burton Brown and Robert Soar asserted that "It is not possible to develop an instrument which looks at all important dimensions of a classroom at one time or in a single score."[6] Adoption

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[4]ibid.

[5]Barak Rosenshine and Marilyn Martin, "Teacher Education and Teaching Behavior: Comments on the State-of-the-Research," *Educational Researcher*, July/August, 1974, American Educational Research Association, Washington, D.C., pp. 11-12.

[6]Bob Burton Brown and Robert S. Soar, *Available Tools and Techniques for Evaluation Innovations*, Institute for Development of Human Resources, College of Education, University of Florida, Gainesville, Florida, p. 5.

of any one system, then, would very likely not even look at important dimensions of classrooms. The alternative is frightening: a gaggle of instruments being applied by outside "observers"—shades of Grand Central Station!

So, defining and describing teacher behavior in the classroom remains adequately to be done.

What about connections between teacher behavior and student achievement?

A. S. Barr, writing for the 1952 *Encyclopedia of Educational Research* said, "It seems sound to attempt the evaluation of teaching efficiency on the basis of pupil growth, but a practical procedure has not yet been developed."[7]

McFadden, writing in 1970 said, "Little is known about the relative importance of different aspects of teaching to student learning."[8]

Alexander Mood, writing in 1971 said, "At the present moment we cannot make any sort of meaningful quantitative estimate of the effect of teachers on student achievement."[9]

Gene Glass, speaking at the 1972 Stanford Conference on the Stull Act, said, "I would propose that no characteristic of teaching be incorporated into the rating scales until research has established both that it can be reliably observed and that it bears some significant relationship to desired pupil cognitive and affective states."[10]

Rosenshine and Martin, writing in 1974, restate a theme Rosenshine has often asserted, "Systematic studies on teacher training have been conducted for more than ten years and yet a fundamental problem is still unresolved and relatively unstudied. That is, although we know that we are generally able to train teachers in a variety of skills, the utility of these skills must be accepted on faith."[11]

Defining and measuring student achievement, except in a very few cognitive areas, is not satisfactory either. Even the achievement test makers, themselves, take the soft approach and ask that their tests not be used as final criteria.

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[7]A. S. Barr, "Teaching Competencies," *Encyclopedia of Educational Research*, 1952, p. 1146.

[8]Dennis N. McFadden, *Increasing the Effectiveness of Educational Management--Project D: Appraising Teacher Performance.* The School Management Institute and Battelle Memorial Institute, Ohio, 1970, p. 2.

[9]Alexander M. Mood, "Do Teachers Make A Difference?" *Do Teachers Make A Difference? A Report on Recent Research on Pupil Achievement*, U.S. Office of Education, 1971.

[10]Gene V. Glass, "Statistical and Measurement Problems in Implementing the Stull Act," *Mandated Evaluation of Educators: A Conference on California's Stull Act*, October 1972, p. 87.

[11]Rosenshine and Martin, op. cit., p. 11.

Charles W. Sanford, writing for the 1952 *Encyclopedia of Educational Research*, said, "Pupil achievement would seem to be a justifiable criterion of teaching success. However, its use is accompanied by numerous difficulties, not the least of which is in answer to the question, 'What achievement?' Answers are varied and include such items as information and knowledge, attitudes, appreciations, and skills. Further difficulties are created by the lack of agreement upon what information, what knowledge, and so on; the absence of valid and reliable instruments for measuring specified achievements, the possibility that pupil achievement as ordinarily measured is nearly valueless as it may be merely a measure of the efficiency with which the pupil retained factual information long enough to pass the test; the lack of compatibility between some of the measuring instruments and the recognized objectives of education; and the rather well-supported suspicion that the pupil's gain in at least information and knowledge is due more to his inherent ability and his habits of study than to the instruction offered by a teacher."[12]

I have not seen data that makes this more than twenty-year-old position invalid. When were achievement tests really updated—not just face-lifted? Maybe since 1951, but do the new versions obviate these claims?

Terrel H. Bell, writing in 1971, said, "We need to come to the task of finding out what works and what does not work after we have better mastery of measuring student performance as a product."[13]

Finally, H. Thomas James, in 1971, said, "The results of the teaching act are measured over long periods of time in which many teachers are involved with a given child, and the assignment of cause for an individual failure among such diffuse contributions is virtually impossible under existing arrangements for schooling."[14]

There is much talk about criterion-referenced measures, domain-referenced measures, and so on, but these largely are out in the future. Even if perfected, the problem of establishing cause and effect remains.

What we need in order to have a firm platform under anything as ambitious, expensive, and full of threat as C/PBTE is evidence that products of these programs produce more, and more important, student learning than products of non-C/PBTE programs. If it is too early to call for such evidence, where are the plans being laid and the funding being provided to establish or refute the claims of C/PBTE proponents?

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[12]Charles W. Sanford and Lloyd J. Trump, "Preservice Selection," *Encyclopedia of Educational Research*, 1952, p. 1391.

[13]Terrel H. Bell, "The Means and Ends of Accountability," *Proceedings of the Conference on Educational Accountability*, Hollywood, California, March 1971. Educational Testing Service, Princeton, New Jersey, 1971, p. C-6.

[14]H. Thomas James, "Public Expectations," *Proceedings of the Conference on Educational Accountability*, Hollywood, California, March 1971. Educational Testing Service, Princeton, New Jersey, p. H-5.

In summary of this section of my remarks, I make these comments:

1. The basis in fact for C/PBTE is shallow and not yet substantive enough to wholly depend upon since critical planks in the platform supporting C/PBTE are yet to be hewn.

2. C/PBTE suffers from the bandwagon, panacea approach and opens itself to the backlash of discredit because of the extravagent claims made for it.

3. Unless the idea is unhitched from the accountability movement which places classroom teachers alone in the bull's-eye, it will be bludgeoned to death in some places and nibbled to death in others.

It won't be easy to force two million highly educated, articulate, and increasingly well organized professionals to do anything which has such a shallow basis in fact and which doesn't make sense to them. If these two million people are teachers and if they feel the proposals will not really serve the best interests of students, it would be even more difficult to shotgun them into submission. I think the evidence regarding the fate of other highly touted curriculum reform movements bears testimony to this fact.

Lucien Kinney was my major doctoral adviser at Stanford, and I worked with development of the CTA version of the California Definition of Teacher Competence right after leaving Stanford. Lucien used to say that teacher education programs reflected nothing as much as they reflected the power structure of the institution. This may be cynical, but he had as much experience as almost anybody in teacher education program development.

The California Definition was the result of application of reason, logic, and experience. It was an armchair definition of teacher competence. Until I can be convinced that the currently popular definitions of teacher competence labeled C/PBTE are based on something other than reason, logic, and experience, I'll have to regard them as potentially no panacea—anymore so than the California Definition was a panacea.

Reason, logic, and experience! What comfortable companions these have been for man through the years!

When science could not or did not provide evidence, man speculated, reasoned, and examined his experience. Of course, these are the sources of hypotheses and can be preludes to solid evidence. But, I'm not sure I can commit myself intellectually to the notion that there may be an omnipresent, omnipotent science which will, at some magic time, provide evidence upon which to base all human endeavors.

I must remind myself, as I flirt with reason, logic, and experience as bases for action, that these fickle muses led "medical" men to use leeches and bleeding, "religious" men to debate the number of angels that could dance on a pin, "scientific" men to declare that the earth is flat, that the earth is the center of the universe. (You could add to this list, I'm sure.)

Unless the claims for C/PBTE are justified in terms of the ultimate criterion, C/PBTE is just an effort to supplant one set of fantasies with another.

It is amply demonstrated that human beings can be trained to do a wide variety of things. They can be trained to be efficient killers, assemble computers, walk on the moon, preach a sermon, break into Watergate, erase tapes, transplant hearts, manufacture artificial kidneys, etc., etc. So—teachers can be trained to ask questions higher up Bloom's scale, to accept student ideas, to be task oriented, to structure, to employ variety and to be flexible, even to be enthusiastic or to appear so, etc.. etc.

But these "skills" or "behaviors" may fall far short of the mark.

Those in the audience who have studied piano or any other musical instrument, realize, I'm sure, that Czerny mastered the technique of playing scales, arpeggios, trills, two- and four-part inventions, and many other marvelous feats of dexterity and control. This did not make him a Beethoven, a Brahms, or a Bach. To be sure, these artists also mastered the techniques, helped by master teachers like Czerny.

Van Gogh mastered brush techniques while he studied in Paris—and then went on to invent his own brush techniques for others to learn. But his art is far more than brush technique, as I'm sure anyone who has spent a day in that wonderful Van Gogh museum in Amsterdam would testify.

Let us not be deluded that we know enough about technique, or how to recognize, describe, and measure it, or how to transmit it to a would-be practitioner, or that technique may even be the real essence of teaching. Let us not become over-committed to the C/PBTE approach.

Professor Gene Glass, as well as others, have asserted that Rosenshine's study of the studies indicates that the usefulness of some behaviors has been established with enough confidence to incorporate them into practices in teacher education.[15] These should be defined so that what they mean is known and agreed upon, procedures for their acquisition and perfection should be developed.

Procedures for verifying that a would-be practitioner is indeed in command of this little arsenal of technique need to be developed and made reliable. Once we know that numbers of practitioners are in command of this little arsenal, we then should seek evidence about the effectiveness of the techniques across a wide range of kinds of students, practitioners, and schools. When this is done, we then will just have begun to have bases for abandoning a tiny bit of our dependence upon reason, logic, and experience.

A major concern that I have about C/PBTE is that, like traditional teacher education, its effectiveness is measured at the point of leaving college and in terms of practitioner behavior. In spite of the grand claims being made for C/PBTE, I have not discovered specific efforts to establish its effectiveness in terms of the ultimate criterion. Until that is under way, proof that it is more effective is absent.

The notion that command of a little arsenal of techniques is sufficient should be laid to rest—given the "deep six" wherever it rears its ugly head. Command of trills and arpeggios does not a Beethoven make.

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[15]Gene V. Glass, op. cit., p. 88.

I am confident, and there are many others who share this confidence, that the little arsenal of techniques covers only a small fraction of the whole, that there remains a large area of pure art, which doesn't lend itself to description in behavioral terms.

The truth of an observation made by Tom James is upon us, "The results of the teaching act are measured over long periods of time in which many teachers are involved with a given child, and the assignment of cause for an individual failure among such diffuse contributions is virtually impossible under existing arrangements for schooling."[16]

David Ryans earlier stated a theme which is worth setting in this context. He said, "Actually, the seeming relevance and appropriateness of the measurement of student behaviors and their products as indicators of teacher performance may be more apparent than real, for the producers of (or contributors to) student behavior or achievement are numerous, and it is most difficult to designate and partial out the contribution to a particular product made by specified aspect of the producing situation, such as the teacher."[17]

He then makes a point which I feel is extremely important in this day when Stull Acts are passed with the declared intention of "getting" teachers, when the accountability movement which spawned C/PBTE and PPBS is focused on individual teachers, and school board association representatives state that they are interested in termination and decertification, and not especially interested in improving the financial support base for teacher education programs. Dr. Ryans said, "The usefulness of research findings pertaining to the predictions of teacher effectiveness will be greatest when the results are considered in an actuarial context, rather than in attempting highly accurate prediction for given individuals."[18]

Incorporating the less than a dozen behaviors identified by Rosenshine into teacher education programs could be productive of student learning, but let's not rush to cement them into certification statutes and certainly make more modest claims about their efficacy until more evidence is in. Any attempt to cement these into recertification standards will be met, I'm confident, with a solid wall of opposition.

Opposition would be justified because such recertification standards would ignore important elements contributing to the success or non-success of practitioners. Dr. Bell made this point when he said, "When the student fails to learn, the entire system must be introspective."[19]

Harold McNally made the point that arouses opposition from classroom teachers to the recertification notion. He said, "Let us not fall into the old, old trap that it must be the teachers, alone,

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[16]ibid.

[17]David G. Ryans, "Teacher Effectiveness," *Encyclopedia of Educational Research*, Third Edition, 1960, pp. 1487-1490.

[18]ibid.

[19]Terrel H. Bell, op. cit., p. C-1.

who shall be accountable, that they shall be the scapegoats from the shortcomings of the system, whatever those may be."[20] Attempts to bend teachers into this mold comes at a time when teachers, more effectively organized than ever before, have begun to exert their influence to avoid again being blamed for the failure of another panacea, another "magic bullet," another scheme hatched out of the scientific management syndrome which has cost the nation billions of dollars in cost overruns in the defense industry and is now being given the band wagon treatment in education.

A major problem that I see with the "con" argument on C/PBTE is that there is no basis in fact for teacher education programs which do not claim to be C/PBTE. They are based on armchair speculation, reason, logic, and experience too! But we must go on, doing the best we can. We cannot wait for the millennium of research to produce neat, validated, reliable, parsimonious "evidence" for us.

Let us admit, then, for the moment at least, that C/PBTE proponents are only talking about presage and process criteria and make no real claims for product criteria except in the sense that the product is teacher behavior. This falls far short of the ultimate criterion suggested by the American Educational Research Association; namely, "pupils' achievement and success in life" and drops perhaps as low as tenth rank in that hierarchy of criteria according to ultimacy.[21] But, if that is the best we can do at the moment, we must do it the best we can.

I am able to settle for that, accompanied as it should be, by modest claims, no straight-jacketing, and generously supported research efforts to validate the practices, but only under certain conditions.

Proponents of C/PBTE must realize that to leave teachers out of the essential steps of planning and evaluating is to doom the effort to failure. Teachers are not obstructionists when they are partners with full voting rights. For example, I suspect that Rosenshine's list of behaviors would elicit positive responses from teachers. Any extension of the list which results from application of reason, logic, and experience will be more likely to gain acceptance if teachers are equal partners in calling up reason, logic, and experience. As McFadden said, "It has been found that if standards of performance and technique appraisal are perceived as not having credibility by those being appraised, and if the appraisal of the person's capabilities is made without inputs from him, such a system or program usually decreases staff morale and increases anxiety about job security."[22]

The growth of collective bargaining laws and practices for teachers indicates that teachers are going to have decision-making authority. They must be made full partners in this enterprise.

To put it in so many words: since the teaching profession is forced to rely heavily upon reason, logic, and experience in defining teacher competencies, it is obvious that the licensed practitioners should be relied upon to apply their equally productive reason, logic, and experience to the problem.

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[20]Harold J. McNally, "Teacher Evaluation That Makes A Difference," *Educational Leadership*, January 1972, p. 357.

[21]N. L. Gage, "Paradigms for Research on Teaching," *Handbook of Research on Teaching*, Rand McNally & Company, Chicago, 1963, p. 117.

[22]Dennis N. McFadden, op. cit., p. 3.

To close them out is to treat two million practitioners as means. As Glass put it, "The philosophy that regards 'changes in pupil behavior' as 'the real thing' about education treats two million adults as means, and tends to disregard them as ends in themselves. I would dwell on the need to protect the teachers, but they seem quite able to protect themselves these days."[23]

I would add a postscript to Dr. Glass' comment: Teachers are growing more able by the day to protect themselves. I'd add also that they are growing more able to protect the arena of their practice from onslaughts by the "I do unto others but not unto myself" types peddling the latest version of the scientific management panacea.

So we are forced by the inadequacies of our science to rely heavily upon reason, logic, and experience! We must broaden the base of application of these ancient muses. Include classroom teachers as full partners (we call that parity) in calling up reason, logic, and experience. I'm confident the results will be better. Concurrent with this, and again with teachers as full partners, we must design the research and get it funded to continue the validation process. Maybe, someday, come the millennium, we can free a greater part of our practice from fantasy.

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[23]Gene V. Glass, op. cit., p. 90.

Chapter IV

Models, Strategies and Change

A MODEL TO EVALUATE IN-SERVICE PERSONNEL DEVELOPMENT IN VOCATIONAL-TECHNICAL EDUCATION

by Ron Daugherty*

Not too long ago I had the opportunity of serving as project director for a project which was funded through the U.S. Office of Education under the EPDA portion of the 1963 Vocational Education Amendments. I greeted this new assignment with some reluctance because, after all, we have been talking about evaluation in education for a long time, and I just assumed that to develop another model for evaluation would be a rather uneventful and rather unchallenging task. As usual, my initial assessment couldn't have been more wrong. At the outset I was working with Dr. Lloyd Briggs who was head of the EPDA program at that time in the position Dr. Duane Nielsen presently holds. I found Dr. Briggs to be very excited about this project, and I was to later find out why.

The excitement grew out of a very early joint decision by our project staff and the U.S. Office of Education, EPDA staff. That decision was to develop a model through maximum involvement of those people who would be using the model throughout the country. The model components just had to be designed to meet their needs. Most of you have the opportunity to work within a state's boundaries, and even there I'm sure you find some difference of opinion about what the needs are and what is good for "me". Take those differences of opinion and multiply them by fifty and you have some idea as to the task of trying to reach a national consensus for a controversial evaluation model. Other than the fact that two states nearly seceded from the union as a result of our activity, the fierce intellectual discussions (fighting) over what was the most important thing in the evaluation of in-service programs was truly an exciting and educational experience for all involved.

After scrapping major portions of what we had developed as a model about three different times in a row, as a result of the input from our reviewers, we had a model which we were ready to pilot test. We did conduct a pilot test of our model to evaluate personnel development in vocational-technical education in the states of Tennessee and California. Though time and resources were not sufficient to allow us to conduct the test at a level that we would have preferred, we did collect sufficient data to enable us again to make rather significant changes in our model. The result has been that we now have a model to evaluate in-service personnel development in vocational-technical education which has undergone the scrutiny of some of the finest people in the state departments, universities, and local education agencies throughout our land. It's this model I would like to visit with you briefly about this afternoon so you can make a decision as to whether this model has any value to your areas of interest at this time.

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*Ron Daugherty, associate director, The Center for Vocational Education.

As a result of our visit here this afternoon I am hopeful that as a participant you will have accomplished the following four objectives:

1. That you will have written down this title: "A Model to Evaluate In-service Personnel Development in Vocational-Technical Education;"

2. That you will have recorded the stated purpose of this model;

3. That you will have identified, on paper, the nine major steps to using this model; and

4. That you will have recorded the directions for ordering a copy of "A Model to Evaluate In-service Personnel Development in Vocational-Technical Education."

Now, let me proceed in the order of the objectives as I stated them.

The title, once again, is "A Model to Evaluate In-service Personnel Development in Vocational-Technical Education."

This model has been designed as a procedure to assist the office of the state director of vocational education to conduct an evaluation of in-service personnel development activities funded under Section 553 of the 1968 Vocational Education Amendments and those activities similar to Section 553 projects but funded from another source. It is a procedure which will allow the state agency to first define information to help them in determining the extent to which these purposes have been attained through their funded projects.

These were the conditions under which our project staff set out to develop this evaluation model and it was those conditions which we kept foremost in mind throughout the development of this model. The model has been pilot tested in a very limited manner in two states where Section 553 EPDA projects had been conducted. I would like to suggest to you that there is a possibility this model, with some adaptations, could be useful for the evaluation of in-service development programs at the university or within a large local education system. The materials have not been pilot tested nor, to my knowledge, have they been used in other than a state education agency setting. I believe that you people involved in personnel development, at whatever level you may be responsible, may find components of this model useful if some adaptation is made to accommodate your unique needs. Therefore, I encourage you, explore the use of the model in settings other than which it was designed for, with careful adaptation for your particular and unique needs.

Now, let us take a look at the nine major steps used in this model for conducting evaluation. Step one involves making the decision that you're going to evaluate an in-service personnel development program and that this suggested model is going to be a part of your evaluation strategy. Once you have selected this model, your next step is to select the projects or in-service activities to be evaluated and to determine the sample which will be the contributing group to this evaluation. The model contains a manual of instructions for the distribution and collection of survey forms which outline the sampling technique suggested for acquiring data in this evaluation. This evaluation technique is a step-by-step procedure that can be used whether you're statistically inclined or not.

Step three is distributing and collecting the survey forms. The manual identified in the previous step gives guidelines for distributing these survey forms and following up to assure that a significant return is received in order to conduct your evaluation. The model contains four survey forms which are to be distributed, filled out, and returned as input to the evaluation process. One form is to the state program coordinator or the person overseeing the total in-service personnel development program. A second survey form goes out to the directors of each of the personnel development projects or activities. The third is a personnel development participant survey which goes out to a sample of all the participants in the in-service program. The fourth survey form goes to the supervisors of those participants in the personnel development program surveyed by the participant instrument that I just listed for you. All four of these survey forms are included as a part of the model.

The fourth step is to select a state evaluation team. Guidelines for this selection are included as a portion of one of the manuals in this model. The state coordinator is directed to select five persons to serve on the state evaluation team. One of these five people is to be designated as a chairman of the group by the state coordinator. The guidelines set out six specific groups from which the five-person team is to be selected. This portion of the model may be the one requiring the greatest adaptation for your use.

Step five involves the processing and preparation of data for the state evaluation team meeting. A manual is provided in this model to assist the state coordinator of personnel development to prepare data for the use of members of the state evaluation team. The instructions include specific steps and a proposed format for data collected in the process of the evaluation. The manual contains both a set of tables which will serve as a format for hand-processing such data, and secondly, a computer program and instructions for processing the data through the computer. Either processing procedure can be used, dependent upon the size of population surveyed. Again, the processing preparation of this data is keyed specifically to the four survey forms that I mentioned in step three.

The sixth step is to hold a state evaluation team meeting. The model contains a manual of instructions for use by the state evaluation team. Among these directions are a set of guidelines for interpreting the processed data resulting from step five. The state coordinator of personnel development is available to assist the state evaluation team but is a non-voting member of that team and does not prepare the final report.

The model calls for step seven to be the preparation of an evaluation report on in-service personnel development. The state evaluation team is charged with responsibility for producing such a report. A suggested outline for the report is contained in the manual of instructions for the state evaluation team. The final report should be provided to the state director of vocational education. It is suggested at such time as the team turns this written report over to the state director they should meet with him to discuss their findings and recommendations.

The model suggests that the eighth step in this evaluation process should be the state director's review and analysis of the evaluation report. The process of evaluation includes steps which will result in recommended changes in a given program being evaluated. Therefore, the director's analysis of this final report should result in some recommendations or directives which are aimed at improving the in-service personnel development program being operated and/or funded out of the state office of vocational education.

The ninth step, of course, involves the state directors taking action and bringing about the necessary and desired changes within the in-service development program during the following years' activities. These final two steps in the process of evaluating the in-service personnel development program is extremely important, for without positive corrective action, the overall program cannot grow, and cannot be adjusted to more nearly align the activities and purposes of the program with the needs of the students in vocational-technical education. Such an evaluation activity on an annual or similar time scale can be very helpful in assuring that a series of separately funded and separately administered activities become coordinated, planned, implemented, and followed up to achieve certain goals as deemed most appropriate and necessary within a given state.

We must now cover our fourth objective, and that's how to obtain a copy of this model, if you're so inclined and if you have some need for conducting evaluations of in-service personnel development programs. This model was developed with sufficient funds to provide each state educational agency with two complimentary copies of this model. You may be able to borrow a copy from the Vocational EPDA Personnel Development Coordinator of your state office. However, if you want a copy of your own, the model is available to you at the cost of reproduction and handling. It can be obtained for $6.00 by ordering the "Guidelines and Procedures for a Model to Evaluate In-service Personnel Development in Vocational-Technical Education" from: Product Utilization Section, The Center for Vocational Education, 1960 Kenny Road, Columbus, Ohio 43210.

To provide you any further information on this model for evaluation it would be necessary to go into the various steps in the guidelines and procedures for conducting the evaluation. I believe to do that at this time would be taking portions of the model out of context and would be relatively meaningless to those of you who are trying to understand it. Therefore, I would suggest that you take a closer look at the model. I would point out that there are copies of this model on display in The Center's display booth here at this conference.

I do hope that you will take upon yourself the responsibility for seeing that this model is put in the hands of those individuals throughout our profession who might make use of such a model, in hopes that these suggested procedures will be helpful in improving the in-service personnel development programs for vocational and technical education throughout our country and particularly in the geographical areas of greatest concern to you.

STRATEGIES OF PERSONNEL DEVELOPMENT FOR VOCATIONAL EDUCATION IN CANADA

by Darrell R. LeBlanc*

During the past few years there has been an increasing emphasis on in-service education for instructors. However, even though the general aim of instructor improvement may be common to a variety of efforts, with inherent implications for both instructor of and instruction in educational programs, there has arisen a diversity of opinion as to how this can best be accomplished. This certainly is the case in Canada for there are many points of view as to what strategy should be used for in-service education programs. Obviously, these points of view are reflected in the requirements necessary to obtain a teaching position and for longevity in that position within a specific locale.

There are those in Canada who maintain that a vocational instructor requires only eighteen weeks of pedagogy (three - six week summer institutes). Further professional development is discouraged for, the system has the instructor it wants, doing the job it wants and if the job is done well pay increases are automatic. Other administrators are more flexible and recognize both an "internal" route as well as an "external" route. It is left to the individual instructor as to which route is followed but the courses of each route are given equal rating for salary grid purposes. In other words, if a certain number of courses are required in order to be reclassified to a higher salary bracket, it does not matter whether these courses are "external" (university degree directed) or "internal" courses provided by the Professional Development Section of the institution. Although in the latter situation course credibility may only exist within the institution offering the course.

It should also be noted that, in a sense, the majority of professional development for vocational instructors is of an "in-service nature" for, the instructor usually has a position, whether it be in a secondary vocational school, post-secondary institute of technology or trade school or industry, prior to involvement in course work. Thus, the hiring of an instructor is primarily based on a demonstrated ability in the subject area with secondary consideration given to "potential ability to teach." Development of the potential teaching ability comes after the position is acquired.

Although there still exists traditional approaches to in-service education there are a number of innovative efforts which are trying to liberalize traditional structures in such a way that a higher degree of flexibility is provided. Flexibility which permits a greater number of paths and rates of progress through the curriculum This is required if a curriculum is to be designed which will service instructors. That is to say, flexibility is required if a curriculum is to enhance individual self-fulfillment for the greatest number and perform this without needless duplication of effort.

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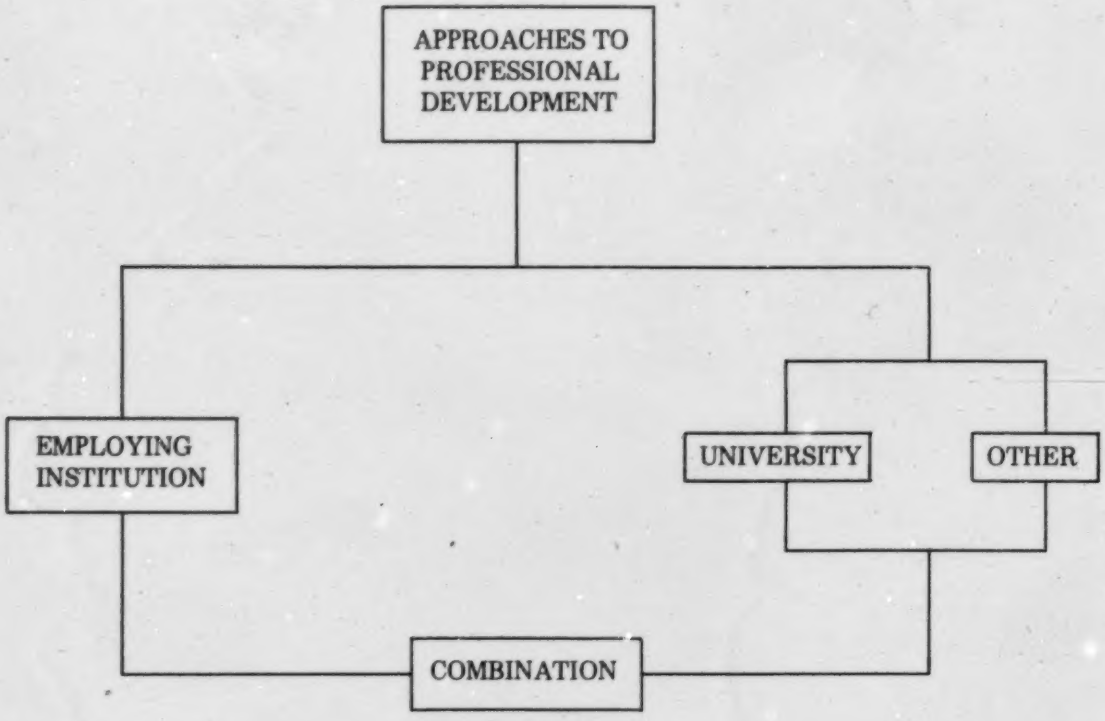
*Darrell R. LeBlanc, chairman, Vocational Education Division, The University of New Brunswick.

The following diagram outlines the common approaches to in-service education and will provide a better understanding of the Canadian scene.



I. Employing Institution

This approach provides courses within the institution for its staff members. Courses may be conducted either by personnel within the institution or personnel brought in from outside. Usually, courses of a basic, practical nature are given such as orientation to the institution, how to teach a lesson, how to use A/V equipment, or how to order materials. Relatively little time is devoted to theory. This approach is designed by and for personnel of a specific institution.

II. University

This approach is usually a degree route. For persons coming into this type of program they normally are either employed or have promise of employment in one form or another. The candidate is given degree credit for previous trade training (certification) and industrial experience. The amount of credit varies with the institution but ranges from four-five credits for seven to nine years of industrial experience (five credits being approximately equal to one university academic year) to ten plus credits for five to seven years of industrial experience. These credits are granted upon successful completion of the first year of university study. Most candidates are supported by either the employing institution, provincial government, or federal government when engaged in full-time study.

An example of this approach is the University of New Brunswick Bachelor of Education (Vocational) degree program. The program is as follows:

1. Entrance is based on results of competency exams, trade training, work experience, and the recommendation of a committee composed of representatives from the university, department of education, apprenticeship board, and the specialty area in question.

2. Advance credit — up to eight credits are granted. This includes a maximum of five credits for trade training and a maximum of three credits for industrial experience. Amount of credit is determined by (a) trade certification, (b) competency exams, and (c) verified work experience related to the teaching specialty. This is examined in light of the requirements of the situation to which the individual will eventually go.

3. The remainder of the four year degree program is comprised of courses in: (a) pedagogy, (b) specialization subjects—designed to provide the theoretical basis for the area of expertise, (c) humanities, and (d) electives in an area of interest.

III. Other

In this approach neither a university nor any other educational institution is responsible for in-service development. In this case a condition of employment requires that the instructor attend summer institutes conducted by the federal government through an agency such as the Community College Division of the provincial government. Three summers of six weeks each must be completed within a four year time period. Upon completion of the three summers certification is finalized.

IV. Combination Programs

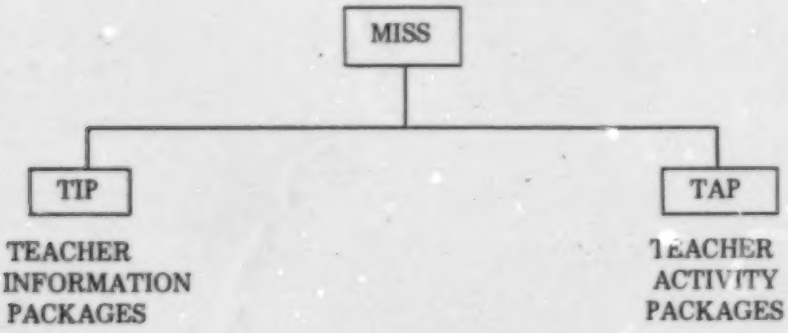
There are at least two endeavors which are attempting to meet instructor needs, but from different standpoints. The first is:

A. Modular Instructor Study System (MISS) — this approach is attempting to work from the degree program back to the needs of specific institutions. The system is being developed for two basic reasons:

   1. By modularizing the curriculum related to the competencies required by prospective teachers, both the instructor and the institution can determine what is "missing" from the instructor's background and remedy the situation prior to a major problem developing.

   2. It is believed that a more relevant program should be developed in which an instructor could achieve a more realistic education. This was founded on the premise that: (a) each individual learns at his own rate by means unique to himself and (b) since each individual will have different pre-entry knowledges and skills a more flexible approach than is traditionally the case is required.

The MISS approach has two components as shown in the following diagram.



Each of these two packages are "teachable units" with the Teacher Information Package (TIP) concerned with the theoretical or the "why" and related information and the Teacher Activity Package (TAP) concerned with the practical or the "what" and "how to do."

B. Learner Evaluation and Activity Development (LEAD) – this approach is primarily directed toward development of instructors within a specific institution—Holland College—and will take into consideration the programs acceptance by professional institutions.

In order to gain an understanding of this approach two systems need to be reviewed. First the DACum (Designing or Developing a Curriculum) and secondly the STEP (Self-Training and Evaluation Process) programs will be discussed. The discussion will be from the standpoint of the student for in the LEAD approach the instructor will be a student.

1. Developing a Curriculum (DACum)

This system was developed by General Learning Corporation of New York, in conjunction with the Experimental Projects Branch, Department of Regional Economic Expansion in Canada. It was felt that a new approach to curriculum development, the end result of which would be a more flexible learning pattern for the student, was needed. Therefore, the DACum process was developed in such a way that it would give the learner concrete points of reference from which to plan daily activities as well as future needs.

With the DACum process it is possible to plan a curriculum and record that curriculum so that all have an accurate idea as to what is required. Curriculum can be communicated and controlled by those directly involved in the learning process in concrete terms. Essentially, the DACum process, or the end result of the process, is a single sheet skill profile that serves as both curriculum plan and evaluation instrument of an occupational training program. However,

this process can be and is used in all fields of endeavor. Thus, it is an entire academic field or large segment of that field or occupation on a single sheet in the form of a graphic representation. This tends to treat each element as part of the larger whole. It is an analysis of a specific field of endeavor where general areas of competence are defined, then these general areas are subdivided into individual blocks of knowledge. These blocks are defined simply and placed on a chart. Each block represents an individual goal for learning achievement.

The chart also has a rating scale used to record achievement in each block. Thus, the chart doubles as a record keeping system. In some of the trade areas the DACum chart becomes a diploma or certificate of achievement in the occupation and is taken by the learner with him when he applies for a job. However, it also serves as a guidance tool prior to entry to a training program for, based on this chart, an accurate pre-testing program can be designed and at the end of a program it can be used as a placement tool. This can be done because the instructor, the learner and outsiders know exactly to what degree a student has completed various segments of knowledge within the chart.

How is the Chart Developed?

A committee is established to develop the chart. The best people for this task are those who are already existing in the field, with one exception, and that is the trained instructor or teacher. These people tend to focus on learning activities, rather than on analysis of the area. In a trade occupation, existing skilled persons in the occupation (possibly defined by the employer), some of whom may have been promoted to supervisor or become specialists in the occupation, asked to join the committee. Thus, in the automotive area, a committee might be formed of one or two general garage mechanics, a shop foreman and a sprinkling of specialists—electrical, engine, transmission and so on.

Stages of Development

a. General Areas of Competence are Defined.

   These are not usually complex or complicated but are readily identified. In defining general areas of competence obvious divisions of knowledge and skill are noted, for example, in the automotive trade, obvious divisions would be service and repair fuel system or service and repair electrical system.

b. Identify, Isolate, and Define Blocks of Knowledge for Each General Area of Competence.

   The level of definition is kept simple. In a trade area each block is prefaced with the statement "the (student/learner) person will be able to. . . ." This leaves a simple action definition. If a definition is too complex,

too much time is lost in the process and the committee loses momentum. In these blocks all knowledge and skill requirements are defined in terms of observable behavior. Such terms as "understand, know how to or know" are not included. This makes the definition of concrete knowledge and skills easy.

Different levels of difficulty such as abstract reasoning skills can be built in. For example in the automotive trade--detect and diagnose engine faults. In step number two, any definition is adopted when it is found that most committee members, who have an adequate background in the area, understand what is meant by the terminology.

c. Structure the Knowledge and Skills into a Desired Learning Sequence.

To do this the committee starts at the left and then works to the right trying to suppress traditional methods of handling subject matter while trying to keep in mind a person who is in an actual learning or work situation.

The Rating Scale

In the DACum process the focus is on the most readily available method of evaluation--observable behavior. The process looks at the learner as outside observers do in evaluating his work. In other words, a student is evaluated as industry looks at its employees since the educational process takes place in an actual performance oriented environment. All persons involved in evaluation of the learner take part in an initial orientation program. Orientation consists of making the learner aware of how the charts are used as well as how rating will take place. A detailed examination of the chart and sample ratings are looked at to give the learner an idea as to what is expected of him. During this process, emphasis is placed on clarifying terminology used in the chart and in the rating scale.

How is a Chart Used by a Student?

When a learner enters the educational program, he is given a chart and oriented to the learning environment. During the orientation he becomes familiar with the system. He then proceeds to evaluate his prior experience and define his level of knowledge or skill in any of the blocks noted on the chart. At the end of this examination he prepares an initial level profile of his own knowledge or skill. The instructor helps the learner rate himself by asking him questions relating to those blocks of information which the learner feels he has mastered. After this has taken place, the learner selects one of the blocks on the chart as his immediate goal, and attempts to perform what is asked. During this process the instructor will closely observe the performance in an attempt to confirm the accuracy of the initial evaluation. Once the learner has completed the block, performance is evaluated using the rating scale included on the chart. The final

rating is done in conjuction with the instructor. If the learner is satisfied with the rating he then selects another block of information on which to study. If he is not satisfied with his performance, he can again go back to study materials and attempt to perform at a higher level. During this process the instructor is a resource person from whom the learner can request assistance and advice. The learner can also consult other relevant learning resources such as manuals, information sheets, job sheets, or use pre-catalogued films, slides, overlays, and so on. If the instructor is not fully satisfied with the learner's performance, the instructor will discuss the quality of performance with the student and give direction on how to better perform the required activity.

2. Self Training and Evaluation Process (STEP)

On June 29, 1970, Holland College in Prince Edward Island enrolled students in a system of training called the STEP program. In the fall of the same year the college committed itself totally to this new approach and since that date over 500 students have been enrolled in courses operated under the STEP program. Essentially, Holland College is a post-secondary institution offering courses in fields of business, technology, and applied arts. The objective of this college is to help learners to assume responsibility for their own development while acquiring skills required for gainful employment.

For the organization of programs the college settled on the task oriented occupational analysis used in the DACum system. The DACum chart whether used in the DACum process or the STEP program outlines the task that a person working in a specific field must be able to perform and later serve as a curriculum outline for the learner. Since this chart is the basic working document, the selection of a committee to develop the chart is very important—as individuals they must be knowledgeable of the field and as a group they must provide comprehensive coverage of the field. The outcome is arrived at through consensus and is in the form of a chart. Normally, a chart is prepared during anywhere from eight to ten hours to a few days, depending on the complexity of the field. In rare cases task groups have to be convened a second or third time.

Preparing Resource Material

In each department of the college a STEP or resource room is established. In the room is shelving with a vertical file or box labelled to match each task which is listed on the chart. In each file goes resource material designed to help the learner acquire the skill.

Evaluation

Since instructors do not spend a great deal of time in lecturing and formal classes are few, they are free to spend a large portion of their time in the evaluation of student achievement. No assessments are made, no ratings are assigned except in a one to one student/instructor situation. The student evaluates himself first,

then this evaluation is discussed with the instructor. An assessment of student marking has found that students tend to underrate themselves rather than overrate their performance in a task.

Student Learning Process

When students arrive at the college to start studies, an orientation program is conducted. This consists of a slide-tape presentation and informal discussion, sometimes continuing over several days so that the full concept of the program is understood. It is during this orientation period that each student is issued a copy of the chart outlining his program. Orientation includes discussion of the chart and the student is given credit for any chart content in which he has proven performance. This is called an entry rating and is enclosed in a diamond box to identify it. Later ratings, confirmed by the instructor, are also shown but these are in a circle. All ratings are dated and initialed by the instructor. During discussions with the instructor the learner selects a certain skill to develop. Once this is done the learner may go directly to written resources or he may undertake a project or problem so that he can demonstrate mastery of the block. The learning situations are as realistic as possible.

In order that learning problems are identified as quickly as possible, each student is assigned an advisor who is responsible for maintaining regular contact with that student and noting general progress. An interview between student and advisor occurs at least once every two weeks. The advisor is also responsible to see that the student chart is kept up to date, even though he may not do all ratings himself.

A Distant Early Warning (DEW) system is useful in order to alert both the instructor and student to potential problems. Each three weeks, as regularly and precisely as in preparing the college payroll an analysis of student progress is made in the registrar's office. If danger signals appear, the advisor is alerted and asked for information, if no improvement is noted during the next analysis, a DEW letter is sent directly to the student. Letters are sent by the registrar but only after consultation with the instructors. Normally, students who have not shown any progress during a six week period are in danger of not being able to meet the objective which they set for themselves when entering the course. The reason for these checks is that as instructors, college staff feel that they have the responsibility to insure that the student meet the objective which was set. If the possibility of meeting his objective is in doubt, he should be advised at the earliest possible date so that appropriate steps can be taken. It may be that a new objective may have to be established or in some cases, temporary termination of the course and a period of wage earning employment may have to be done.

Although the preceeding information on the DACum and STEP processes have been discussed in terms of a student going in to the process, that is exactly what the instructor becomes—a student—when entering the instructor program. The chart is designed to meet the unique needs of instructors in Holland College and is called the LEAD (Learner Evaluation and Activity Development) chart. The principles underlying the development and use of the chart and evaluation of the instructor are those which have been ennunciated in earlier sections of this presentation.

CHANGE IN THE SCHOOLS
OR
THE MORE THINGS CHANGE THE MORE THEY SEEM TO REMAIN THE SAME

by Arthur Blumberg*

One of the not so obvious benefits that accrues to me as a professor, I believe, is the opportunity that presents itself to learn from my students. Frequently, this learning serves the purpose of putting me more in touch with the real world, of letting me know that mine is a rather privileged position and that I should use my privileges judiciously. Particularly should I be judicious about the manner in which my professorship enables me to criticize the behavior of others but remain uninvolved and protected from that which I criticize.

This point was brought home to me by one of my students a couple of years ago and it leads directly into the focus of my thoughts today. The student in question was a school psychologist. He was a bright, sensitive, and creative person who, for reasons that still remain somewhat of a mystery to both of us, had decided to return to the university to pursue a doctorate in educational administration. One day as I was rambling on about what I saw to be the sorry state of the schools and what occurred in them in the name of learning he stopped me cold with a comment that went something like this: He said, "I wish you professors would stop berating the schools the way you do. There are a lot of very conscientious, hard-working people out there who are trying their damndest to do a good job in very tough circumstances. You have no right to put them down. They need you but they certainly won't ask for your help if they feel you devalue them."

My student was absolutely correct. Those of us who occupy a professor's position are protected. We think and speak from a vantage point of something called academic freedom that enables us to escape from the sanctions that might be imposed on others on the "outside" were they to behave the way we do. And so, while the title of my address may imply that I intend to take your time by telling you how unskilled and rigid the schools are, that is not what I propose to do. Rather, the focus of my remarks will be analytical in nature in an effort to put the problems of change in the schools into a workable and understandable perspective that is devoid of pettiness or paternalistic smiles that communicate the thought, "When they grow up they will see the wisdom of my ways."

A very dear friend and colleague of mine at Syracuse University, Dr. Burton Blatt, and I have discussed many times the question of whether or not the veritable avalanche of new and "creative" programs that we have witnessed in education over the last fifteen years or so have really changed things in any but a surface fashion. My initial impulse was to take the position that they did—indeed

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how could they help but induce some pretty fundamental changes. Teachers were being trained differently, or so I thought; administrators were being exposed to the latest thinking in the applied behavioral sciences; new architectural concepts—open schools, for example—were developed. We had differentiated staffing, accountability, performance based teacher education, team teaching, flexible modular scheduling, the new math, and new approaches to teaching science, to mention but a few of both the programmatic and structural attempts to improve the character of education.

Surely, all of this must have resulted in some fundamental changes in what youngsters learn; in how they learn; and in how they feel about learning. At least, that was my way of thinking. My friend, Burt Blatt, disagreed with me. Indeed, his point was, that we can find some cases where the basic structure, goals, and relationships within a school have changed. But, by and large, what occurs in schools today is not greatly different than what occurred when the two of us were in school, over thirty years ago. As I thought about his argument, reflected on my past and current experience, pursued my studies, and listened to my own school-aged children, I found myself forced to agree with him. Indeed it appears that, with some lighthouse exceptions, the basic patterns of behavior and relationships that obtain between administrators and teachers, among teachers, and between teachers and students have not been strikingly altered.

Let me give you a few examples from my own experience which, though limited, I have been led to believe is a somewhat adequate sample of reality.

1. There is a new "open" high school with which I am familiar. The open spaces are supposed to be conducive to freer student-teacher interaction and more flexible utilization of space. This has apparently occurred, but the open space has also come to another, and I'm sure, unintended purpose. It is this: the teachers are now better able to notify each other when the principal or other supervisory personnel are on the prowl in the science laboratories. They do so by way of opening up a CO_2 fire extinguisher for a moment. The resulting "whoosh," because of the open space, can be heard throughout the laboratory complex, thus serving as an effective warning signal to all concerned. Change but things remain the same.

2. In a city not far from where I live there has been a great deal of concern about taking advantage of new advances in teaching methodology to do a better job of teaching the 3 R's. A friend of mine, a school social worker, told me recently of how the principal of a school in which she works approached her in a very excited manner one morning and insisted that she see the results of one teacher's exceptional work in teaching cursive writing. The principal guided my friend into a classroom and showed her how the teacher had taught each of the youngsters to form the letter "B" in precisely the same way. And the principal was delighted. There are few student behavioral problems in this school, by the way. Dissident youngsters (typically, but not always, meaning blacks) are transferred to other schools where their behavior (usually caused by needs for a more spontaneous environment) is more readily seen as acceptable. Change but things remain the same.

3. Two of my own children as well as several children of friends of mine have accelerated their way through high school thereby graduating as much as a year and a half before their class. The reason for their doing so was not that they were so terribly eager to go to college and become trained for a career. Rather, they were bored and not because they were so outstandingly brilliant or because they were seeking that much overworked feeling of relevancy. It was a case of finding that school, despite the introduction of what were supposed to be exciting and provocative new courses of study, remained

pretty much of a routine matter. The title of a new course, "Human Relations," did little to change the stereotypical classroom behavior of the teacher who taught it, for example. Change but things remain the same.

4. As a final example of "Change but things remain the same" I use a paragraph from *The Culture of the School and the Problem of Change* (Sarason, 1971, pp. 45-46). Sarason uses a study of the new math as an example of the "no change" phenomenon. He makes the point that one of the reasons for the development and introduction of the new math was that children seemed not to enjoy the world of numbers. The new math would fix that. Here is what his study observers reported:

> The two observers came away with the impression that enjoyment was one of the last words they would use to characterize their impressions of the feelings of the children. Struggle was certainly one way of characterizing what was going on but it was not that kind of intellectual struggle which generates its own sources of internal reinforcement or elicits such reinforcements from others—in this case the teacher. At no time in our discussions did any of the six teachers say anything which disconfirmed our opinion that neither children nor teachers enjoyed what they were doing in the sense of feeling intellectual excitement, a desire to persist, and a joy of learning. One had the overwhelming impression of a task having been done not because children desired to do it but because that is the way life is. Using the "joy of learning" as a criterion there appears to be no difference between new and old math.

It may be that, with the exception of Sarason's new math example, you will take the illustrations I have given as picayune and not representative of what is really occurring in the schools. I think not. Though I have no doubt that meaningful things happen to youngsters in school; that the huge bulk of administrators and teachers are sincere and well-intended (some are even quite creative), I am unable to avoid the conclusion that despite the immense amounts of money that have been poured into the schools (colleges and universities, too) and the tremendous advances that have been made in media technology, little has really changed in a way that matters.

I suspect that thoughtful analysis of most new programs that have appeared in the schools will reveal circumstances similar to those found by Sarason. However, as I suggested earlier, I don't perceive my role at this meeting as that of a gadfly-like critic. Rather, what I wish to do is to offer some ideas as to why we have what we have and then, very briefly, suggest a point of view about a strategy for change that might result in not everything being the same.

First, though, I want you to know that I don't believe we can attribute causality for the no change phenomenon to the machinations of evil or stupid people. If that were the case the solution to the problem would be relatively simple and, also, authoritarian. We would just have to fire the evil or stupid ones or, in some cases, wait for them to retire. Further, though the issues that have to be dealt with are indigenous to the system within which we all work it seems not to be fair—indeed, it would be engaging in avoidance—simply to blame it all on some amorphous entity called the system and let it go at that. We have had clearly too many shrill cries concerning how terrible the system is, combined with the anarchic or revolutionary call to overthrow it. What is required, from my viewpoint, is to call into question by way of analysis some specific systemic characteristics that generate forces to maintain things the way they are while giving the illusion that things have changed.

I propose to offer several possibilities in the hope that they will be sufficiently stimulating to most of you to the extent that you won't view my remarks as "old hat." More specifically, I will focus my comments on the way the following three aspects of school character seem to operate to produce no change despite the best intentions of both internal and external change agents—a much overused word, I might add. These three aspects of school character are: (1) the sense, or lack of sense, of institutional being that exists in the schools, (2) an implicit value system that seems to exist in the schools, and (3) the character of change efforts that have been and are still being made. I chose to focus on these three factors because it seems to me that they exercise a pervasive influence over what transpires in the schools but they rarely receive any overt attention.

The Sense, or Lack of Sense, of Institutional Being in the Schools

Though I am a social psychologist and thus interested more in the relationships between and among people, groups, and organizations than I am in personality or psychotherapy, my studying occasionally takes me into these latter areas. So it was that I came across the notions of ontological security and insecurity in R. D. Laing's *The Divided Self* (Pantheon Books, 1969). I was struck by what I saw to be the potential for understanding schools by making the conceptual transfer of the dynamics of ontologically secure or insecure people to schools as organizations.

Ontological security refers to the ultimate sense of one's own being relative to life. To quote Laing,

> We can say that an individual whose own being is secure in this primary existential sense, relatedness with others is potentially gratifying; whereas the ontologically insecure person is preoccupied with preserving rather than gratifying himself: the ordinary circumstances of living threaten his low threshold of security.
>
> If a position of primary ontological security has been reached, the ordinary circumstances of life do not afford a perpetual threat to one's own existance. If such a basis for living has not been reached, the ordinary circumstances of life constitute a continual and deadly threat (Laing, 1969, p. 44).

Laing uses the concept of ontological insecurity to account for individual psychoses. By my transfer of the concept to the schools I am not suggesting that they are psychotic or that there are such things as psychotic organizations. What I am suggesting, however, is that the behavior of schools as organizations frequently communicates to me a strong sense of insecurity as to what it is they are all about. This does not necessarily mean that individual teachers or administrators are not ontologically secure. But the whole is different than the mere sum of the parts, and it is the whole with which I am concerned.

I think I can make this point more clear by referring back to the passage from *The Divided Self* that I just quoted. The key point for me was Laing's note that for the individual whose being is secure, relatedness with others is potentially gratifying but this same relatedness for the person whose being is insecure is threatening.

Like all of you I have held untold numbers of conversations and work sessions with individual administrators and teachers outside of the immediate context of the school as an organization. By and large, these situations have been pleasant and, I think productive. It was as though the people involved wanted to relate, wanted to work, and even, in some cases, wanted to change, On the other hand, I have had many occasions where I attempted to deal with the school as an organization but my experiences were much different. I was confronted with lethargy, defensiveness, and hostility that is frequently expressed as "Ho hum."

Why the difference between the individual and the organization? I can only speculate, of course, but as I rethink these circumstances I can't avoid the recurrent underlying theme of security of being as an individual as opposed to insecurity of being as an institution. As I say this I also realize that there may be a myriad of other factors that enter the picture—factors that may be related to my own lack of skill or, at times, my inability to communicate adequately. Or, factors that may attach to the system's previous experience with people from the outside. Nevertheless, over and over again I get the feeling that school systems and faculties by their behavior communicate that they are unsure of their essential institutional being and react accordingly.

I don't make these points to administer a spanking to the schools with the admonition for them now to behave and "be secure." Quite the contrary, I raise the issue as a point of concern for all of us who are interested in helping schools to change so that we may better understand some of our problems. Schools have been battered. They have been accused of not meeting children's needs, of not teaching youngsters to read, of lacking discipline, of failing to uphold the virtues of American culture, of racism, sexism, and anti-intellectualism. How can the schools, under the circumstances, help but feel under siege and insecure? In a way, I think, we have been caught in a viscious circle by which, having made the schools insecure, efforts to alleviate the insecurity are seen as inducing more of the same. It is not a pleasant situation to be in. But I think that, in many respects, that is where we are and, if we understand that it may lead to the development of strategies of change that may, indeed, make a difference.

Some Counterproductive Implicit Values of Schools

In a book about supervisor-teacher relationships that has been published recently (*Supervisors and Teachers*, McCutchan, 1974), I had occasion to wonder about some of the reasons that supervisors and supervision were greeted with a rather pervasive sense of disutility and defensiveness by teachers. One of the reasons seems clearly to be related to the exercise of unproductive behavioral styles on the part of supervisors. But that wasn't enough to account for the defensive climate. Inquiry revealed that another factor of systemic character lay beneath the surface. I call this factor the implicit peace-keeping function or goal or value-system of the schools, and have broadened it by analogy (admittedly tongue-in-cheek) to a concept of school organizations that likens them to feudal kingdoms. This image of school districts, then, includes a castle in the center with a number of baronial estates in the countryside. The castle has a king, of course. Members of the court live there and it is surrounded by a wall. The baronial estates, too, are surrounded by walls. But what is important to the analogy is the substance of what is owed to the king by the barons in order to receive his protection. Primarily, the results of my inquiry suggested, two things are owed and expected to be paid: loyalty and the ability to keep the peace.

People tend to smile when I discuss my feudal analogy. The smiles, I'm afraid, give credence to it and have a direct bearing on my topic today. If loyalty and keeping the peace are implicit goals of school system organization then they also serve, perhaps in an unintended way, to make the system more closed and impervious to change than it might otherwise be. It is no secret, for example, that school people who display disloyalty by openly criticizing the system in which they are working soon find themselves shunted to the side by most of their colleagues. And, in one school with which I am familiar, the principal's efforts to relax the climate so that youngsters were not so regimented were disapproved of by the central office as creating chaos. The view from the outside was that he had not kept the peace.

Well, the process of creating change that makes a difference is not necessarily a peaceful business and it may involve some disloyalty in the sense of suggesting that "we shouldn't be doing what we have been doing!" The conflict is obvious. It involves the consequences of deciding to maintain things as they are, thus communicating loyalty and, hopefully, a peaceful scene or attempting to restructure ways of thinking and acting and, in the process, thus creating perceptions of disloyalty and a not so peaceful scene.

Let me give you an ever so small and, perhaps over-simplified example of what I mean. The school social worker whom I mentioned earlier recounted a follow-up anecdote to the same classroom situation she had described. The particular teacher in question had communicated to her on a number of occasions how hard the class was to manage. The only way to deal with them, said she, was to enforce rigid discipline which included marching in a line to the lavatory and the drinking fountain at prescribed intervals during the day. It happened that the teacher was ill for a couple of days and the social worker who has had no teaching experience, decided to see for herself what was going on. She volunteered to take the class for the period of the teacher's absence. She restructured the class into small learning activity groups. The youngsters were allowed to move from group to group so long as they did not annoy or disturb others. Further, they were told that they could go to the lavatory or get a drink when they wished, again with the caution not to disturb others. The results were as one might expect. The children were industrious and appeared to enjoy what they were doing.

The problem that my social worker friend was concerned about was the reaction of the teacher when she returned to school. The prediction was that there would be accusations of disloyalty and failure to keep the peace, and indeed there were some rumblings to that effect.

I think the implications of this little anecdote for problems of change in the schools are clear. Change but everything seems to remain the same.

The Character of Change Efforts in the Schools

I've just finished reading a new book entitled, appropriately enough, *Change* (Watzlawick, Weakland, and Fisch, 1974), that helped me immensely to clarify my thinking about change efforts in the schools. The focus of the book is also the focus of my remarks today: trying to account for the phenomenon of "Everything changes but everything remains the same." Instead of being concerned with systemic qualities of an organization that induce this phenomenon, however, the authors are

concerned with the character of and basic assumptions behind strategies and tactics of change that are applied to individuals and social systems.

The main argument of the book rests on understanding the difference between what the authors refer to as first and second order changes. And, though I can't possibly do complete justice to the thinking represented in the book in my time here today, I believe that a brief discussion will make the necessary points.

First order changes involve essentially the rearrangement or substitution of parts of a system without disturbing the system. When first order changes are the basis of a change effort we may indeed achieve some illusions of changed behavior but we leave untouched the basic framework through which people conceptualize their tasks and their relationships with others.

A simple and somewhat humorous but also, in a sense, tragic example of the results of a first order change effort was told to me by a colleague some years ago. My colleague, a professor, was consulting with the management of an Air Force installation. He was ushered into the commanding officer's office and immediately was served coffee by an aide. The commanding officer sat behind his desk and conducted the conference in a very austere manner. During the course of the conference it developed that this officer had been to a management training program where he had learned that if you serve coffee at a meeting the atmosphere would become more informal thus serving to put people at ease so that they would be able to talk freely. Well, indeed he had served the coffee, but nothing else changed. The basic framework through which he viewed his interaction with others remained the same and the results of these interactions also remained the same—sterile.[1]

A second order change involves interventions with the system that enable the people in it to transcend their present frame of reference relative to the problems they are confronting. Second order changes aim at helping people reformulate their view of the situation with which they are dealing so that they may get to the root of things. When second order changes are induced into a system the results are circumstances that really are different from when they started, in contradistinction to the results of first order change programs.

As an example of the difference between first and second order, I build on an analogy supplied by the authors of *Change*. Let us suppose you are in your car which has a standard shift. You are in high gear and you come to a steep hill. As you start to go up the hill you apply more pressure to the accelerator in order to maintain momentum. In effect the application of pressure is a first order change. You've added more fuel, but if you will forgive my anthropomorphic reference, you haven't changed the engine's frame of reference. The hill is very steep and your car starts to slow down. Despite the fact that you have the accelerator down to the floor it's obvious to you that the car will stall. You shift gears and the car responds accordingly thus solving the problem. In effect, the shifting of gears altered the engine's frame of reference. It was a second order change.

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[1]I often wonder, incidentally, what would happen if we stopped serving coffee or having coffee breaks at conferences such as this. Outside of the demand and thus the price of coffee going down, my predictions are that the productivity of the conferences would not be changed in the slightest.

Though I've been engaged in trying to simplify what in the arena of human affairs is a very complex phenomenon, the implications for changes in the schools are profound. To put it bluntly, it seems to me that most of the changes that have been attempted in the schools could be typed as first order. And they have had the predicted result of everything remaining essentially the same. Examples abound. The huge bulk of in-service training programs, for instance, with which I believe many of you are concerned, are first order change efforts. They are attempts to give the engine more gas, as it were. And they have effect of maintaining things essentially as they are.

I don't want to leave the impression that first order changes are bad and second order changes are good. To return to the automobile analogy, if you want to increase your speed from 50 to 55 on a level road you don't shift down. You give the engine more gas. And this point touches on the crux of the problem which is, what is the essential character of the situation that confronts us? If the improvement of what occurs in the schools, or in a particular school, simply requires a bit more of what is already going on then it would be silly to reformulate the whole situation. On the other hand, and I think this position is much more likely to represent reality, if what needs to be done in the schools involves a re-ordering of thinking and redefinition of the problem it seems wasteful to provide more of the same.

Another example may make this point clear. On a number of occasions I have been asked to help a school district develop a more effective instrument for supervisors to use in evaluating teachers—a first order change. Upon meeting and inquiry, it typically develops that the essence of the problem is not that the present instrument is no good (though it may be) but, rather, the nature and quality of the communications linkage between teachers and administrators is problematical. The development of a new instrument would not change this at all. What is required is a second order change that would focus in on the communications problem so that issues of teacher evaluation may be examined in a new light. Needless to say, I've not been asked back by the districts involved to pursue the problem. They were interested in first order changes and I in those of the second order. We simply think differently.

It is wonderfully tempting for a person in my position at this moment, with a captive audience in front of him, to lay out a number of prescriptions that will, if administered correctly, cure the problems in the schools I've just talked about. It seems necessary to resist that temtation, however, for good and ample reasons. First, the schools have had prescriptions thrown at them so often that I'm rather sure little attention would be paid to any new ones. It would be nothing but an academic exercise for me to suggest any more. Second, prescriptions imply a medical model of social intervention and the medical model is falling into increasing disrepute among people who are concerned with social problems. The reason for this increasing fall from grace of the medical model is simple. It has not worked, either with people or institutions that have problems. Third, a prescription from me relative to the behavior of others implies that I know best what is good for them. I disabused myself of this notion some time ago mostly as a result, I think, of trying to deal with the growing pains of my teen-age children.

What I have been left with—better, what I have learned—is that whatever expertise I have is best applied to the process by which solutions are arrived at and much less to the substance of the solution. An issue, of course, is the matter of choice. I believe the essential ingredient for the induction of productive change in the schools involves, first, the making of choices based on the best available data secured from all who have a stake in the schools. This includes, primarily, administrators, teachers, parents, and children. Notice I left out professors, except as they may be parents of school children.

At the very root of things, then, it seems to me that we have what we have in the schools because, indeed, we have made a number of implicit choices which, for the most part, seem to have gone relatively unquestioned in any substantial sort of way. We have chosen to place a priority on peace-keeping and loyalty. We have chosen not to "go public" about questions of the essential being of the schools. We have chosen to engage in the type of change programs that tend to leave things unchanged.

For those of us interested in change in the schools, then, it seems to me that the most important functions we can play are: (1) to help people become more aware of the choices that have been made and the behavioral consequences that have flowed from them, and (2) to help people become more aware of the choices that lay ahead and the potential consequences of each.

This is, perhaps, an overly simplistic view of things. In the final analysis, however, I think that the strategy of working through the system of informed choices is most important for two major reasons. First, it puts responsibility for decisions where it belongs—on the people who must live with those decisions. Second, as we recognize—better, insist—that people, groups, and organizations need to take responsibility for the decisions by which they live, we confirm their essential humanity, difficult as this confirmation process may be. Without such confirmation I suspect we will continue as we are. And that, too, will be a choice.

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Chapter V

Reports of Discussion Groups

DISCUSSION GROUP REPORTS

Individual interaction among the partcipants was an important and integral aspect of the seminar. As a means of fostering group interaction beyond general sessions and informal discussions, participants were divided into six discussion groups for part of two afternoons. Prior to the seminar a discussion leader and a recorder for each group was selected and provided guidelines for their responsibilities and a charge as to the topics and questions to be considered. The discussion group topics were as follows:

Group A — Principles and Strategies of In-service Personnel Development

Group B — Needs Identification for and Program Evaluation of In-service Personnel Development

Group C — Supervising Teachers: Selection, Renewal and Rewards

Group D — Recertification and Competency-Based Standards

Group E — Trends, Issues, and Problems of In-service Personnel Development

Group F — Career Development for Professional Personnel.

Reports from each of these discussion groups follow in the hope that some of the dialogue of the seminar can be more widely shared.

Principles and Strategies of In-service Personnel Development

Discussion Group A

Leader: Willard M. Bateson*
Recorder: Keith Fiscus**

Participants of Group A were divided into seven subgroups and were given the charge to develop lists of guiding principles and strategies for conducting in-service personnel development in vocational education. The reports of the subgroups were discussed and summarized into the three sections designated as guiding principles, strategies and activities, and alternative programs and activities.

Guiding Principles

1. The program for in-service personnel development should involve all teaching faculty and administrative staff responsible for vocational education.

2. The program should communicate with candor, clarity, and comprehensiveness the purposes or mission of the agency or institution, and the changes necessary for the fulfillment of these programs.

3. The program should be based upon a needs assessment survey or audit of personnel (knowledge, skills, experience, competencies, etc.) with data collected, categorized, and evaluated from the viewpoint of priority selection.

4. The program should include: (a) clearly defined goals for development, (b) the hierarchy of needs determined by needs assessment, (c) strategies and activities designed to meet these needs, and (d) criteria for evaluation of accomplishments, with a rationale for each of these components explicitly expressed in its description.

5. The program should be comprehensive yet sufficiently flexible to permit the selection of goal and strategy priorities.

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6. The program should define the goals of the agency or institution in general long-range terms and define strategies in specific short-range activities.

7. The program should provide "system thinking" by considering each component and its envisioned outcome in relation to organizational patterns, various curricula, educational environment, institutional or agency experience, and uncontrollable and controllable variables.

8. The program should be so designed that it challenges every individual involved in vocational education to use his time and energy in participation in one or more of the activities so that he may share in the reward of personal upgrading of competence and may also take pride in the agency or institutional development.

9. The program should be so designed that it is not considered as an innovation, an experiment, and adjunct to education, compensatory education for incompetence, nor a punitive resource, but rather it should be designed as a regular, continuous, integral part of the total educational endeavor.

10. The program should encorporate essential financial planning and budgeting.

Strategies and Activities

1. Formal short-term educational situations, such as institutes, seminars, conferences, workshops, consultations, and consortia.

2. Upgrading stations, such as:

   (a) formal university and college classes

   (b) school and industry personnel exchange programs

   (c) upgrading resource centers

   (d) classes and programs conducted by private schools or industry.

3. Educational leaves:

   (a) released time for study and occupational experiences

   (b) leave without pay for study or occupational experiences

   (c) sabbatical leaves for professional improvement.

4. Field trips and tours:

   (a) to businesses and industry

(b) to colleges and universities

(c) intra-institutional visits

(d) selective observation.

5. External degrees.

6. Professional improvements:

(a) participation in professional organizations

(b) attend professional conventions

(c) plan professional growth

(d) develop a professional library.

7. Vocational education, and administrative internship programs.

8. Utilization of advisory committee study and recommendations.

9. Participation and cooperation with trade associations and labor groups.

10. Utilization of communicative media:

(a) sharing resources by mail

(b) telephone conferences

(c) exchange of video and audio tapes

(d) professional journals and newsletters

(e) education by television.

11. Utilization and application of research activities.

12. Utilization of methods employed by non-education groups. Example-Management by Objectives.

Some Alternative Programs and Activities for EPDA Fundings

Programs and activities for in-service personnel development which the group felt could be supported by EPDA are:

1. School - business exchange programs
2. Leadership development internships
3. Follow-up clinics
4. Advanced degree programs
5. National curriculum diffusion programs
6. Teacher visitation programs
7. University - school exchanges
8. Tuition grants for study incentive
9. Cooperative education programs for teachers and other vocational personnel
10. Regional travel tours for selected teachers.

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Needs Identification for and Program Evaluation
of In-service Personnel Development

Discussion Group B

Leader: Leonard Torres
Recorder: Fairchild Carter

Needs Identification

The most apparent aspect of vocational education in the past two decades has been a preoccupation with change. Bombarded with popular phrases ranging from accountability to individualized and competency-based instruction, vocational educators have expended vast sums of money as well as energy assessing the current state of education. Improving preservice education does not necessarily lessen the need for continued in-service personnel development. With changing conditions, educators are continually encountering new and challenging problems, and in-service education should be helpful to those wishing to cope with the task at hand. To benefit from some of the emerging delivery systems, vocational educators seek effective in-service programs.

In its broadest concept in-service education includes all activities of employed teachers that contribute to professional growth and competence. The importance of identifying and proceeding from problems confronted by the teacher should focus attention on needs identification for in-service personnel development. At least three principles of learning are basic to an in-service program.

1. Learning occurs best when it begins with matters of real interest and concern to the learner.

2. As the area of individual concern is extended the rate of learning is likely to increase.

3. The development of an individual's special interests and potentialities tends to promote continued learning.

Needs identification originates from one or more sources such as:

1. Teachers

2. Administrators

3. Advisory committees-collectively or from individual members

4. Students-former and current

5. Reactions to or evaluations of preservice programs

6. Ad hoc committees of selected individuals

7. Legislators

8. Workshops.

Program Evaluation

In-service programs ranging from teachers' institutes to correspondence courses have served the profession for over a century. The increased pressure to account for expenditures and to justify programs has prompted educators to seek effective means of evaluating educational programs. Program evaluation is basically a decision-making process which involves a systematic search for relevant data. The evaluation of an in-service program is, therefore, the process of obtaining and providing information for making educational decisions.

Its format is basically that of any effective management process applied to the problem.

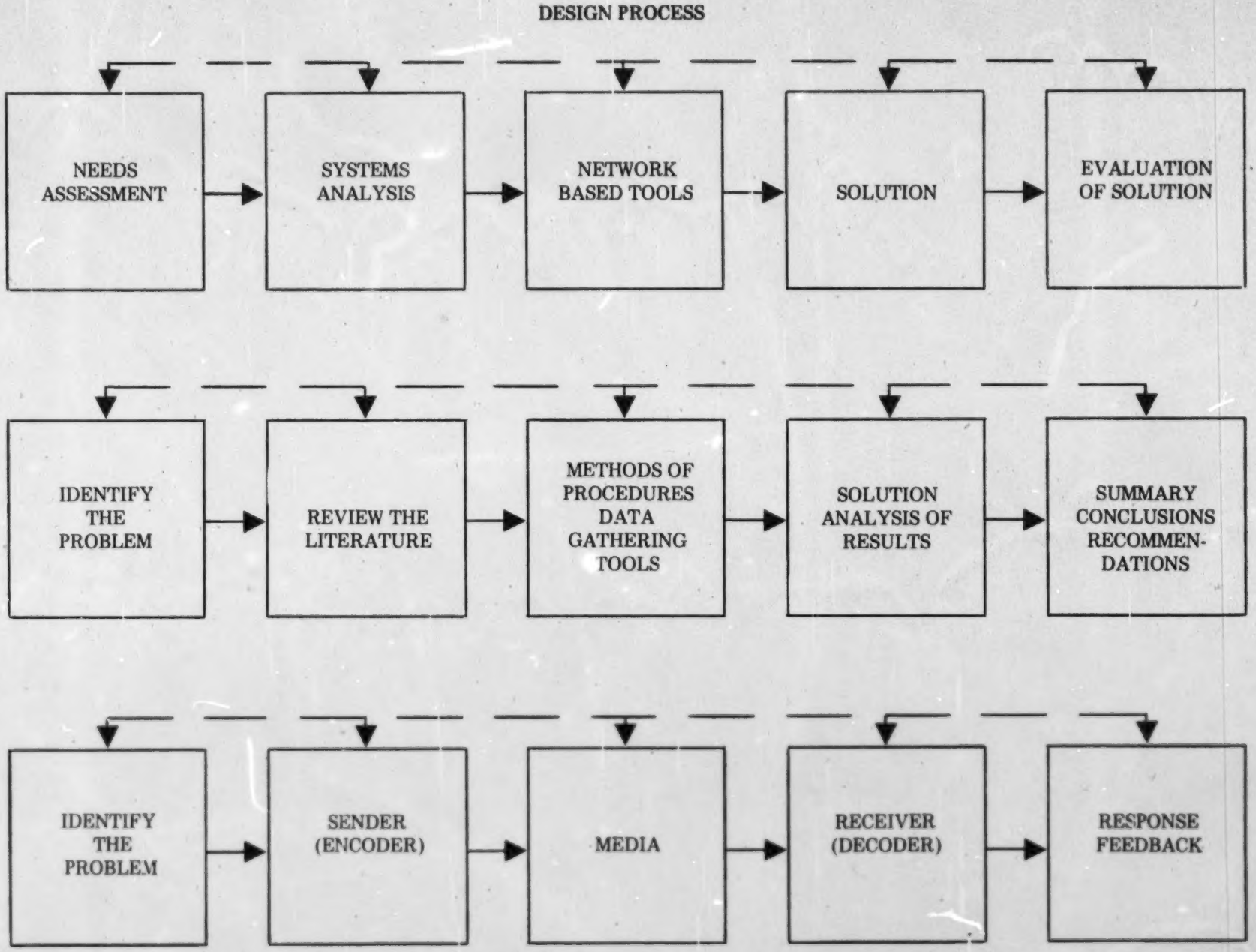
1. Determine the objectives

2. Gather the data

3. Analyze the data

4. Interpret the data

5. Make a decision.


DESIGN PROCESS
NEEDS ASSESSMENT
SYSTEMS ANALYSIS
NETWORK BASED TOOLS
SOLUTION
EVALUATION OF SOLUTION
IDENTIFY THE PROBLEM
REVIEW THE LITERATURE
METHODS OF PROCEDURES DATA GATHERING TOOLS
SOLUTION ANALYSIS OF RESULTS
SUMMARY CONCLUSIONS RECOMMEN-DATIONS
IDENTIFY THE PROBLEM
SENDER (ENCODER)
MEDIA
RECEIVER (DECODER)
RESPONSE FEEDBACK

Supervising Teachers: Selection, Renewal and Rewards

Discussion Group C

Leader: Earl Carpenter
Recorder: Jasper S. Lee

The meeting was opened with introductions and a statement by the discussion leader. The essence of this statement was that one aspect of teacher education which seems to have almost universal endorsement among both the friends and critics of professional education is the student teaching program. Conant, in *The Education of American Teachers*, states ". . . the one indisputably essential element in professional education is practice teaching."[1] Furthermore, supervising teachers are the most important individuals influencing the teaching behavior of beginning teachers. This finding has been reported many times in research studies dealing with the training of teachers. In spite of the apparently well-established importance of supervising the teachers, the literature is weak in evidence that their importance has been sufficiently exploited in attempting to affect educational change.

The term "supervising teacher" was defined as the person (teacher) in a school who supervises student teachers. This definition was offered to clarify the topic of discussion, since the term "cooperating teacher" is often used.

The recorder with input from the group, listed six questions on the chalkboard to guide discussion. These were:

1. What criteria are used in selecting supervising teachers?
2. Do supervising teachers need professional renewal?
3. How is professional renewal provided for supervising teachers? What sources of funding are used?
4. How are supervising teachers rewarded?
5. What preparation do supervising teachers need?
6. How is the internship (student teaching) conducted?

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[1]James B. Conant. *The Education of American Teachers*. New York: McGraw-Hill Book Company, 1963, p. 142.

Initial discussion focused on question 1, "What criteria are used in selecting supervising teachers?" A number of criteria was stated as being used in the different states represented by group participants. Some of the criteria are relatively difficult to ascertain and go beyond the personal traits of a teacher to include the entire school and community. It was also indicated that on some occasions the criteria were sacrificed in order to secure an adequate number of supervising teachers. Some of the criteria were:

Educational qualifications of the teacher (In most cases a masters degree is required.)

Master teacher (It was felt that a supervising teacher should have superior competence in the field of teaching.)

Fully developed instructional program including youth organization, adult education, and other program components which may be applicable.

School facilities which are modern and appropriate should be available for the instructional areas being taught.

Attitude of local school administrators should be positive toward the student teaching experience and administrator should be qualified to assist in the program as necessary.

Socioeconomic factors of a community should be considered as well as occupational specialization of the student teacher.

Question 2, "Do supervising teachers need professional renewal?" was answered affirmatively and the group proceeded to discuss how the renewal is provided, Question 3. In general, workshops, college courses, and individual conferences are widely used with supervising teachers. Discussion of the use of EPDA funds in professional renewal indicated that very little had been done with supervising teachers using these funds. One state held a workshop using EPDA funds for supervising teachers and teachers who had the promise of becoming supervising teachers.

Discussion of Question 4, "How are supervising teachers rewarded?" revealed that honoraria and free tuition are the most widely used rewards. It was felt that supervising teachers need greater rewards and that they should have some type of rank with the college or univeristy for which they are supervising student teachers.

Question 5, "What preparation do supervising teachers need?" was briefly discussed. Current practice often stipulates that supervising teachers should have or be actively seeking masters degrees. It was acknowledged that a special course on the supervision of student teachers might justifiably be a requirement. In addition, several criteria involved in selecting supervising teachers are related to preparation.

Considerable discussion was focused on "How is the internship (student teaching) conducted?" Several of the most significant areas mentioned are as follows:

1. The length of time is often too short and needs to include activities associated with the opening and closing of school.

2. Remediation should be provided following student teaching to develop competency in areas of weakness, as observed during student teaching.

3. Prospective teachers need in-school contact much earlier than the traditional student teaching period, such as in the sophomore or junior years of college.

4. Student teachers need contact with several teachers in a school.

5. The name of student teaching needs to be changed. Several suggestions were pre-professional experience, professional field experience, and internship.

6. Joint planning of student teaching programs should be done by the local education agency and the college or university. It was suggested that the supervising teacher and college staff be granted more or less equal responsibility for the experiences of a given student teacher.

Recertification and Competency-Based Standards

Discussion Group D

Leader: Ellen H. Meister*
Recorder: Irving E. Bach**

To prepare vocational education teachers in traditional programs and then expect them to function in expanded roles in the total system is short sighted and misleading according to presentors at the Teacher Education section of the 1973 AVA Convention. Furthermore, we well know that the characteristics and competencies needed to meet the challenge before us are quite different from those needed by specialists in a single vocational service area.

Thus, the tasks ahead, for vocational teacher educators and others involved in personnel development, are to (1) clearly identify the characteristics and competencies needed, and (2) carefully design the type of personnel development program(s) that will enhance these competencies and characteristics. Critical to this identification and designing process is commitment to more than a pedagogical orientation in professional development. Swanson, in his paper presented at this seminar, urged both occupational competence and a concern for the underlying issues in the entire work force, in addition to pedagogical competence. Furthermore, he cautioned against a preoccupation with skill training and task analyses.

Professional development activities, traditionally regarded as ancillary, must be afforded a policy position. To this end, Group D attempted to address itself to the following issues related to recertification and competency-based standards.

A. Current Practices

1. Strengths

2. Weaknesses

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*Ellen H. Meister, coordinator of Career Education, Madison Public Schools, Madison, Wisconsin.

**Irving E. Bach, adviser, Trade and Industrial Education, Graduate School of Education, Rutgers University, New Brunswick, New Jersey.

B. Future Context for Vocational Education Recertification

1. Commonalities across services, roles, etc.

2. Preparation for expanded roles (why-what-how-how to know)

C. The Delivery of Needed Characteristics and Competencies

1. Programs

2. Strategies

Discussion

In attempting to ascertain the current practices used in certifying vocational teachers, it was immediately apparent that differences rather than commonalities existed among the states. Diversity, with almost each speaker appearing proud of what was occurring in his/her state, in the process of teacher certification, ranged from permanent certification at the completion of an approved certification and/or degree program to no degree of permanence. Processes were interspersed with requirements for courses, credits, in-service programs (both college and local education agency sponsored) and various pilot programs for alternative methods of certification. Interest was also expressed in the use of Teacher Renewal Centers for updating and recertificating vocational teachers. Some of the participants were concerned with updating the technical skills and knowledges in conjunction with industry or with the use of such devices as those produced by the National Occupational Competency Testing Institute, administered by the Educational Testing Service, Princeton, New Jersey.

Those persons favoring recertification, defined as:

> The process whereby a certificate issued for a term of years (e.g., five years) is issued for another term. In order to have the certificate issued for another term, the individual must generally meet specific (state) requirements, stated in terms of college credits, in-service participation, teaching experience, occupational experience, or any combination of these experiences.

believed its function was to improve the teacher's effectiveness. Those opposed to the practice felt it was a punitive action and was used as a cop-out vehicle by administrators who were not carrying out their supervisory responsiblities.

It appeared that many states had definite recertification plans along with supportive systems for personnel development, with teacher input included. Some state plans for vocational education also included at least a minimum listing of competencies which provide the foundation for a program of personnel development.

The participants in Group D selected the following areas for discussion, signifying their concern for answers to pressing problems, but time limitations prevented the group from really settling down to confront these issues:

A. Certification as it affects non-public schools (e.g., private schools, quasi-public schools, correctional institutions, etc.).

B. Concept of growth as reflected in certification process.

C. Research to "prove" which specific certification process is better or best.

D. Influence of professional organizations on certification.

E. Ramifications of the societal work ethic on improvement of teacher and student behavior.

Trends, Issues, and Problems of In-service Teacher Education

Discussion Group E

Leader: Denver Hutson
Recorder: Marjorie Jerry

Seminar

Discussion Group Objective: Increase the knowledge and awareness of participants in the in-service areas of trends, issues, and problems.

Recognition seems to be widespread that the quality of instruction and the environment in which it functions affect most profoundly the extent of effectiveness of programs in vocational education. Despite efforts that have contributed to a clarification of the need for development of comprehensive in-service education, there continues to be a serious lack of coordination and cohesiveness to these efforts. Thus, the status of personnel development systems may be characterized generally by fragmentation, discontinuity, and, in reality, a frequent lack of comprehensiveness.

Perhaps the most important charge at this seminar is to examine ways and means to enhance personnel development in vocational education as a comprehensive system and to explore the management of change as related to implementation and improvement of the system. From this point of view, the central focus for this discussion group was on trends, issues, and problems that merit examination and which have implications for in-service education in preparing personnel to assume roles that will promote programs of high quality for the youth and adults of this nation. The discussion sessions evolved into identification of issues and problems related to trends and considerations which have implications for in-service education of secondary and post-secondary vocational personnel. Time allocated for group discussions limited the extent of exploration of topics. However, some attention was addressed to proposed procedures or strategies and current practices with potential for achieving solutions to identified problems.

Trend I. Legislation mandating accountability

Issues:

A. Standards to be achieved by secondary, post-secondary, and teacher education personnel

B. Content of accountability legislation

C. Involvement of state legislative committees in vocational needs assessment for both pre- and in-service education.

D. Role of evaluation as it relates to accountability.

Problems:

A. Who will assume responsibility for the type of accountability to be mandated for in-service education?

B. Who will be responsible for setting the standards for accountability?

Trend II. Competency-based education

Issues:

A. Administration of a competency-based program

B. University credit allowances for performance competencies (professional and technical)

C. Interstate certification requirements for vocational personnel

D. Appropriate quantitative combination of professional and occupational preparation for vocational personnel

Problems:

A. How can competency-based vocational education be implemented at the secondary and post-secondary levels?

B. How can entry level occupational competencies be updated through in-service education?

C. How can cooperation be achieved and resources pooled in developing competency assessment instruments?

D. How can competency standards be built into university policies?

E. How can personal qualities of effective vocational teachers be assessed?

Proposed Procedures or Strategies and Current Practices:

A. Continued piloting and experimentation with competency-based teacher education applied to in-service education

Trend III. Rapid technological advances

Issues:

A. Frequency of technical updating of vocational teachers

Problems:

A. How can competencies be assessed?

B. How can technical updating be implemented?

C. How can in-service education promote the flow of teachers to and from industry?

Trend IV. Decreasing job discrimination

Problems:

A. How can in-service education contribute to personnel development for the promotion of equal occupational opportunities for both sexes, all minority groups, and the disadvantaged and handicapped?

B. How can in-service education promote the utilization of scarce human resources by recycling professional personnel into supportive areas of vocational education?

C. How can in-service education contribute to the effectiveness of guidance and counseling?

Proposed Procedures or Strategies and Current Practices:

A. Coeducational vocational offerings at the secondary level

B. Coeducational exploratory vocational offerings at the pre-secondary level

C. Wheel concept of rotation of both sexes through vocational programs

D. In-service education focusing on career education

Trend V. Increasing involvement of community agencies in providing support services for vocational education

Issues:

A. Blending professional teaching expertise with occupational expertise

Problems:

A. How can community resources be utilized in in-service education?

B. How can communication be established and maintained among supportive agencies?

Procedures or Strategies and Current Practices:

A. Simulation techniques

B. Educational television

C. Offering of courses on Saturdays

D. Use of advisory committees

E. Industry-education exchange

Trend VI. Continuing increases in pre-secondary, secondary, and adult enrollments in vocational-technical programs

Issues:

A. Job placement

B. Allocation of funds to preservice and in-service education

C. Coordination of and provision for adult education

Problems:

A. How can desirable relationships be maintained between the number of students prepared and the opportunities for job placement?

B. How can in-service education contribute to meeting the need for a sufficient number of qualified teachers?

C. How can funds be secured for in-service education?

D. What types of in-service education are needed to prepare and upgrade teachers to meet increasing demands for adult education?

Procedures or Strategies and Current Practices:

A. Contracts for occupational services needed in the educational sector

B. Grants secured through specific proposals

C. Funds allocated directly to the local education agencies

D. Funds allocated to universities for non-credit courses

Trend VII. Increased involvement at the local level in the decision-making process as related to in-service education

Issues:

A. Level at which in-service education needs are assessed

Problems:

A. Who should assume the responsibility for initiating involvement in needs assessment?

B. How can the emphasis for in-service education be shifted from a campus base to a field base?

C. How can preparation of curriculum personnel be implemented?

Procedures or Strategies and Current Practices:

A. Provision of teacher renewal centers in the field

B. Development of a cadre' of "master teachers" as resources and support personnel for in-service education programs

Trend VIII. Increasing in-service education activities for secondary and post-secondary vocational personnel through comprehensive, long-range planning

Issues:

A. Proliferation of in-service education activities

Problems:

A. How can fragmentation, discontinuity, and lack of comprehensive planning for in-service education be overcome?

Trend IX. Increase in interest-group politics

Issues:

A. Negotiation process in relation to certification requirements

Problems:

A. How can in-service education concerning the political sector and organized groups aid vocational personnel in maximizing progress?

B. How can the complexity of organized groups be clarified through in-service?

C. How can the professional interest groups marshall forces through in-service education to promote personnel development?

Additional Considerations:

A. In-service education programs for state department staff

B. In-service education programs for teacher educators

C. In-service education programs for administrators and supervisors of secondary, post-secondary, and adult vocational programs

D. Provision by local education agencies for resident teacher educators to conduct field-based in-service education

E. Redefinition of preservice professional education for the purpose of projecting possible in-service needs and alternative strategies for achieving competencies

F. Responsibility of local education agencies for in-service education

G. Consortium arrangements for in-service education

H. Field-based follow-up of formal in-service programs by teacher educators and state department staff

I. Coordination of supervision between state department staff and teacher educators

J. Professionalism among vocational personnel as related to monitoring standards

K. In-service needs of degree and certificated personnel who delay entrance into teaching

L. Changing nature of society and manpower needs as a factor in developing in-service education programs

M. In-service education as related to differentiated staffing

N. Assessment and coordination of priorities for in-service education by agencies at all levels

As attention is addressed to the trends, issues, and problems of the future, the need for a personnel development system in vocational education is reemphasized. Such a system must have a direct relationship with the students to be served and the programs they are pursuing. Unless the changes in behavior of professionals in vocational and technical education have direct or indirect influence in changing student behaviors, the system should be challenged.

Time limited the discussion of current in-service programs and activities conducted under EPDA funding. The examples identified by the participants included program development and coordination, leadership development, dissemination and interpretation of the use of curriculum materials, field-based personnel development programs, and graduate programs.

Career Development for Professional Personnel

Discussion Group F

Leader: Hazel Crain
Recorder: Joe Kinzer

A discussion of career development for professional personnel necessarily embodies the concerns of the other discussion groups as they deal with in-service teacher education for it reflects the sum of the developmental experiences of one's career. It seems more emphasis in designing in-service education has been given to programmatic or institutional/agency needs than to individuals' needs for career development. In application it is difficult to separate the two. The vocational educator is thus placed in a position of seeking ways to make his learning through in-service experiences serve two kinds of needs—his own need for personal career development and the need to meet external requirements or pressures. In this discussion it is assumed that vocational educators are in a professional position and may be representative of one of the following categories:

1. New teacher recruited from industry (without teaching certification through a B.S.E. degree)
2. New teacher certificated by completion of a preservice degree program
3. Experienced teacher
4. Post-secondary vocational-technical teacher
5. Local educational administrative personnel
6. Educational/administrative personnel at the state level.

For persons in any of these categories, in-service activities may or may not be a part of a degree program. Some in-service activities may be informal or structured in a non-credit framework. They may be designed to update, improve, or advance competencies needed by vocational-technical educators. Though career progression may evolve through circumstantial instances rather than by long-range planning, the reality of career progression for professional personnel cannot be denied. Career progression patterns generally follow one of two directions: (1) horizonal progression of remaining in one position or moving from one to another in the same basic function, or (2) in a vertical progression changing from one function to another (usually with increasing responsibility) such as movement from teacher to local educational administrator, state staff, or teacher educator.

Programs developed and funded through EPDA, Part F, sections 552 and 553 have given significant impetus to career development for vocational educators. There is need to seek ways to utilize this support more effectively as well as to seek other means of assistance for the task.

A series of four questions furnished a structure for exploration of practices and ideas relating to professional career development.

1. In what ways is it possible to foster career development? The individual may set goals for himself in reference to career development or find support in his primary environment. However, employers seem to be viewed as controlling major incentives for career development. States, institutions, agencies, or other such units often prescribe requirements for specific kind or quantity of in-service. Often these result from policy decisions formed on a questionable base and resulting in requirements such as six credits every three years, twelve credits annually until a B.S.E. degree is attained, or a specified number of points to be earned by attending professional meetings, workshops, by independent study, or other similar "systems." Such requirements usually are described as an effort to maintain or improve "quality" of the staff with the reporting/recording reflecting concerns regarding the agency or unit rather than the individual vocational educator. Similarly, LEA's or other units may become involved in a project which requires staff in-service in order to achieve the objectives of the project. Again, the professional development of the staff is focused upon programmatic issues rather than individual needs. Recent in-service activities for the development of career education programs are examples of this approach.

Supervisory/administrative personnel are in potentially effective settings for fostering the career development of the individuals under their direction. Wilhelm's presentation at this conference suggested ways to foster growth in such settings. Other supervisory practices such as assigning increasing responsibilities to staff, advancing individuals on a career ladder within the situation, or changing their functional roles are also potential means of fostering career progression.

Examining career progression patterns (such as data concerning the professional assignments of former EPDA fellows) might also provide direction on ways to identify and foster career development.

2. Providing encouragement toward specific careers versus growth in current career positions? Many of the suggestions under the preceeding question represents encouragement (or requirement) of growth in current career positions since they reflect external sources of influence, often one with a vested interest in the current position. Expansion of such "encouragement" may include reimbursement to educators for costs of advanced study by employers, allowing time for study through leaves or sabbaticals, allowing time for and assisting the educator to return to industry for updating or, provision of in-service by the employer. Many LEA's are following the latter suggestion and providing recognition by points or credits for participation. Questions of transfer of the recognition of such experiences to other LEA's or to the credit structure of degree granting institutions are beginning to be raised. Study in the area would be useful.

Examples of encouragement toward specific careers are more difficult to find. This situation is usually found in two settings—one in which there is an identified "job market need" and another in which one professional plays the role of mentor for another in whom he senses potential for specific career positions. Several EPDA 552 programs were designed to prepare particular professional expertise in areas of need, as curriculum specialists for example. Institutional/agency provisions for assistantships or internships are other means of encouraging development toward specific careers. Recently there are movements toward "retreading" educators and through this approach some teachers from academic backgrounds or graduates from other degree programs are being brought into vocational education. Recruiting teachers from business and industry as well as bringing retired military

personnel into programs for developing vocational educators are other examples. Data concerning career opportunities for professionals and competencies required would again be useful.

3. How are EPDA and other funds currently used in career development programs?

   (A) Training of state department staffs in management by objectives.

   (B) Industry/school exchange programs for development and updating technical skill competencies.

   (C) Workshops to assist new teachers recruited from industry in the development of professional education skills necessary for effective classroom instruction.

   (D) Intern, extern and return experiences for vocational and technical personnel.

   (E) Training vocational personnel, administrators, and counselors to plan, modify, and equip training programs for handicapped vocational-technical students.

   (F) Project designed to train adult vocational teachers (competency-based, staff developed program).

   (G) A program to train teachers to work with disadvantaged adults.

   (H) The development of teaching skills using video-tape equipment in vocational-technical education programs.

   (I) In-service professional education for health occupations teachers.

   (J) Preparing teachers to develop curriculum and materials for instruction.

   (K) Institutional programs in 552 structures.

4. Suggest new or alternative ways EPDA funding may be used to initiate new/innovative in-service for vocational educators.

   (A) Develop a method to provide more lead time for program planning, participant selection, and to facilitate long-range processes to meet needs.

   (B) Develop a program or series of activities to allow leaders in vocational-technical education to become knowledgeable and competent in the political processes in which vocational-technical education is involved.

   (C) Explore possibilities for individuals to participate in appropriate programs in other states (in 553 programs other than those of regional or national scope).

(D) Provide opportunities facilitating individual development on a smaller scale than 552 programs.

(E) Work with policy makers at various levels to develop a philosophic base or rationale for giving direction to policy as it relates to individual career development.

(F) Institute for the administrative advancement of women and minorities in vocational education.

(G) Providing a mobile unit to tour the state offering in-service experiences on varied time basis.

Though there have been references to 553 programs as the "band-aid approach" perhaps such needs have existed and continue to exist. It seems important to continue to provide funding to assist vocational educators in all settings and at all levels, preferably by states.

Vocational education might make more extensive use of excellent opportunities for the development of professional personnel through such programs as the Fullbright Fellowships, the Urban Institute, exchange or internship opportunities with federal government, LEA exchanges with other educational agencies or industry or the ACE Administrative Program. Making more detailed information concerning such opportunities and alternate funding sources easily available to vocational educators would provide a service in itself.

Note: Time limited suggestions, particularly in No. 4. There also seemed to be a lack of understanding by many about the use of 552 and 553 funds in their states. Our Canadian participants could suggest similar activities only. The listings in 3 and 4 may not be wholly accurate or applicable, therefore.

Appendices

APPENDIX A – SEMINAR PROGRAM

SEMINAR OBJECTIVES

1) Identify trends and changes needed for the in-service education of persons engaged in programs of vocational education at all levels.

2) Provide an opportunity for the development and self-improvement of individuals who are responsible for upgrading professional personnel in vocational education.

3) Increase the knowledge and awareness of participants in the in-service areas of:

   a. Principles and Strategies of In-service Personnel Development

   b. Needs Identification for and Program Evaluation of In-service Personnel Development

   c. Supervising Teachers: Selection and Renewal

   d. Recertification and Competency Based Standards

   e. Trends, Issues, and Problems

   f. Career Development for Professional Personnel

MONDAY, OCTOBER 28

3:00-8:00 p.m.	CONFERENCE REGISTRATION	Ballroom Foyer
3:30 p.m.	Tour/visit: Madison Area Technical College (Optional)	
4:30 p.m.	Tour/visit: Madison Area Technical College (Optional)	
5:30 p.m.	Tour/visit: Madison Area Technical College (Optional)	

FIRST GENERAL SESSION

8:00 p.m.	PRESIDER	Grand Ballroom A

Kenney E. Gray, The Center for Vocational Education

WELCOME TO THE BADGER STATE

Eugene Lehrmann, State Director of
Vocational Education, Wisconsin

Barbara Thompson, State Superintendent
of Schools, Wisconsin

KEYNOTE ADDRESS

Philosophical Bases, Trends, and Issues
for In-service Education

Fred T. Wilhelms
Educational Consultant

TUESDAY, OCTOBER 29

8:30 a.m. SECOND GENERAL SESSION — Grand Ballroom A

PRESIDER

Melvin Miller
University of Tennessee

VOCATIONAL EDUCATION AND THE REQUIRED
IN-SERVICE EDUCATION FOR THE 1980's.

Gordon Swanson
The University of Minnesota

PANEL

Merle Strong, University of Wisconsin
Kevin O'Sullivan, American Society
for Training and Development

9:45—10:15 a.m. COFFEE BREAK

10:15 a.m. RESPONSIBILITY AND ACCOUNTABILITY FOR IN-
SERVICE VOCATIONAL EDUCATION PROGRAMS

Robert Worthington
Educational Consultant

PANEL

Gordon Swanson
Robert Worthington

Questions from floor

11:30—1:15 p.m. LUNCH

1:15 p.m. THIRD GENERAL SESSION — Grand Ballroom A

PRESIDER

Roland Krogstad
Wisconsin Research Coordinating Unit

NEW DIRECTIONS OF THE CENTER
FOR VOCATIONAL EDUCATION

Robert E. Taylor
The Center for Vocational Education

1:45—3:00 p.m. SEMINAR DISCUSSION GROUPS

In-service Teacher Education

Group A —	*Principles and Strategies of In-service Personnel Development* *Willard Bateson, Gerald LaBorde*	*Directors Room I*
Group B —	*Needs Identification for and Program Evaluation of In-service Personnel Development* *Leonard Torres, Fairchild Carter*	*Directors Room II*
Group C —	*Supervising Teachers: Selection and Renewal* *Earl Carpenter, Jasper Lee*	*Directors Room III*
Group D —	*Recertification and Competency Based Standards* *Ellen Meister, Irving Bach*	*Directors Room IV*
Group E —	*Trends, Issues, and Problems* *Denver Hutson, Marjorie Jerry*	*Directors Room V*
Group F —	*Career Development for Professional Personnel* *Hazel Crain, Joe Kinzer*	*Directors Room VI*

3:00—3:30 p.m. COFFEE BREAK

3:30—5:00 p.m. INDUSTRY, BUSINESS, AND EDUCATION COOPERATION — Grand Ballroom A

IN-SERVICE PERSONNEL DEVELOPMENT PROGRAMS FOR IMPROVING TECHNICAL COMPETENCE IN TEXAS, OKLAHOMA, AND NEW YORK

Hiram Goad
Texas Education Agency

Zed DeVaughan
Oklahoma State Department of Education

Robert Ullery
New York State Department of Education

8:00 p.m. EVENING (Simultaneous Programs)

CENTER SHOWCASE — Gorham and Hamilton Rooms

USING SIMULATION IN-SERVICE EDUCATION FOR TEACHER-COORDINATORS OF COOPERATIVE EDUCATION

Wayne Schroeder
The Center for Vocational Education

8:00 p.m. WINDOW ON RESEARCH — Grand Ballroom A

TEACHING PERSONNEL TO DEVELOP COMPETENCY-BASED CURRICULA

J. David McCracken
The Ohio State University

8:00 p.m. ALTERNATIVES IN TEACHER PREPARATION — Grand Ballroom B

BACHELOR OF VOCATIONAL-TECHNICAL TEACHER EDUCATION DEGREE PROGRAM

Harold D. Garbett, Idaho State University

WEDNESDAY, OCTOBER 30

8:30 a.m. FOURTH GENERAL SESSION — Grand Ballroom A

PRESIDER

Michael Sugarman
University of Akron

PROGRESS AND PROMISE FOR IN-SERVICE PERFORMANCE-BASED PERSONNEL DEVELOPMENT

STATUS REPORT AND OVERVIEW

Jim Becket
California State Department of Education

EMERGING DEVELOPMENTS

Jim Hamilton
The Center for Vocational Education

Arthur Berkey
Cornell University

10:00–10:30 a.m. COFFEE BREAK

10:30 a.m. COMPETENCY/PERFORMANCE-BASED PERSONNEL CERTIFICATION STANDARDS AND IN-SERVICE EDUCATION

L. O. Andrews
The Ohio State University

Alden Vanderpool
California Teachers Association

Discussion

11:45–1:15 p.m. LUNCH

1:15 p.m. FIFTH GENERAL SESSION Grand Ballroom A

PRESIDER

E. Curtis Henson
Atlanta Public Schools

A MODEL FOR EVALUATING PERSONNEL DEVELOPMENT PROGRAMS

Ronald Daugherty, The Center for Vocational Education

2:15 p.m. COFFEE BREAK

2:30—4:15 p.m. SEMINAR DISCUSSION GROUPS

Same group topics as Tuesday, October 29

Group A — Directors Room I
Group B — Directors Room II
Group C — Directors Room III
Group D — Directors Room IV
Group E — Directors Room V
Group F — Directors Room VI

4:15—5:30 p.m. Tour/visit: Madison Area Technical College (Optional)

8:00 p.m. EVENING (Simultaneous Programs)

WINDOW ON RESEARCH — Grand Ballroom A

VOCATIONAL TEACHER EDUCATION AND THE EFFECTIVE USE OF ADVISORY COMMITTEES

Vocational Education Advisory Committee Project

Leslie H. Cochran
L. Allen Phelps
Joseph F. Skupin
Central Michigan University

8:00 p.m. COMPREHENSIVE STAFF DEVELOPMENT — Grand Ballroom B

A TOTAL APPROACH TO IN-SERVICE STAFF DEVELOPMENT FOR TEACHERS/ADMINISTRATORS OF CAREER EDUCATION

George Russ, New Jersey State Department of Education

Fred Rosi, Vineland Public Schools

Burness Broussard, Glassboro State College

8:00 p.m. INDIVIDUALIZED INFORMATION — Gorham and Hamilton Rooms

INFORMATION SERVICES FOR VOCATIONAL EDUCATION

Wesley E. Budke
The Center for Vocational Education

THURSDAY, OCTOBER 31

8:30 a.m.	SIXTH GENERAL SESSION	Grand Ballroom A
	PRESIDER Virginia Thomas Iowa State University	
	STRATEGIES OF PERSONNEL DEVELOPMENT FOR VOCATIONAL EDUCATORS IN CANADA Darrell R. LeBlanc The University of New Brunswick	
9:30–10:00 a.m.	COFFEE BREAK	
10:00 a.m.	KEYNOTE ADDRESS	Grand Ballroom A
	CHANGE IN THE SCHOOLS AND IN-SERVICE EDUCATION OR THE MORE THINGS CHANGE THE MORE THEY SEEM TO REMAIN THE SAME Arthur Blumberg Syracuse University	
	ANNOUNCEMENTS	
11:30 a.m.	ADJOURN	

APPENDIX B — SEMINAR STAFF

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